

**POSTMODERN WARFARE:  
BEYOND THE HORIZON**

BY  
JEFF GERAGHTY

A DISSERTATION PRESENTED TO THE FACULTY OF  
THE SCHOOL OF ADVANCED AIR AND SPACE STUDIES  
FOR COMPLETION OF GRADUATION REQUIREMENTS

SCHOOL OF ADVANCED AIR AND SPACE STUDIES

AIR UNIVERSITY

MAXWELL AIR FORCE BASE, ALABAMA

JUNE 2013

Report Documentation Page			Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.				
1. REPORT DATE <b>JUN 2013</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-2013 to 00-00-2013</b>
4. TITLE AND SUBTITLE <b>Postmodern Warfare: Beyond The Horizon</b>		5a. CONTRACT NUMBER		
		5b. GRANT NUMBER		
		5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)		5d. PROJECT NUMBER		
		5e. TASK NUMBER		
		5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>School Of Advanced Air And Space Studies,,Air University,,Maxwell Air Force Base,,AL</b>		8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)		
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>				
13. SUPPLEMENTARY NOTES				
14. ABSTRACT <b>The idea that warfare is changing drastically has garnered significant attention over the past few decades. Some commentators contend that such change is revolutionary, that warfare is entering a new era. Indeed, many historians, sociologists, and even practitioners of warfare argue that the entire history of humankind is entering a new era. A plethora of descriptors exist to describe such change, including terms such as the information age, the end of history, fourth generation warfare, or the postmodern epoch. Current events often serve as the basis for pundits to sound these calls of change. New technologies, developments in international politics, and changes in civil-military relationships seem to arrive quickly and promise unending alterations to society. However, a proper assessment of these developments must rely on a theory-based analysis. Furthermore, this assessment must be cognizant of great historical continuities in war and politics.</b>				
15. SUBJECT TERMS				
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES <b>238</b>
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>		

## APPROVAL

The undersigned certify that this thesis meets doctorate-level standards of research, argumentation, and expression.

---

DR. S. MICHAEL PAVELEC (Date)

---

DR. EVERETT C. DOLMAN (Date)

---

DR. JOHN F. GUILMARTIN (Date)

## DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University.

## ABOUT THE AUTHOR

Lieutenant Colonel Jeff Geraghty is assigned to the Joint Strike Fighter Program Office in Crystal City, Virginia. Jeff is a student and practitioner of warfare and technology. He has served in the Air Force as an F-15 and F-16 combat and experimental test pilot, and has piloted dozens of different aircraft types in US and foreign military and civilian inventories. He has also completed numerous non-flying assignments including service in NASA, the Office of the Secretary of Defense (Detainee Policy), the Executive Action Group for the Secretary of and the Chief of Staff of the Air Force, and as a Defense Advanced Research Projects Agency (DARPA) Fellow. Jeff is a lifelong learner and a lifetime athlete. He has earned three master's degrees, one each in the fields of Genetics, Engineering, and History. He is a former football and rugby player-turned runner and triathlete. Jeff and his wife have three children with whom Jeff spends a great deal of his time as coach, teacher, Cub Scout Den Leader, and member of the audience during their various performances, recitals, and events. He and his family enjoy the outdoors, gardening, sports, and fitness.

## ACKNOWLEDGEMENTS

I would like to thank my advisor, Dr. Mike Pavelec for his continued involvement and guidance in this project over the course of the last four years. His recommendations have been timely and valuable at every turn. During the early stages of research for this dissertation, he regularly pulled me up from divagating rabbit-holes and refocused my sights. When a new line of research popped into my head, he reminded me of the task at hand: to turn my years of research and study about postmodern warfare into a publishable dissertation. When my writing started to feel extremely esoteric and overspecialized, I would regain momentum by considering his comment that “a comprehensive argument of what is postmodern war and the postmodern soldier would be interesting, publishable, and important (in whatever order you think is most significant).”

I would also like to thank the faculty of the School of Advanced Air and Space Studies, who afforded me the opportunity to pursue this doctorate in philosophy. Their trust in my academic ability ensured that I turned my otherwise idle time into productive cogitation. I spent many hours on my commutes—train rides home from Washington, D.C., flights to and from the Lockheed Martin plant in Fort Worth, Texas—researching, writing, and revising this paper; without this outlet for my mind I would have played too many hours of angry birds. I owe a special thank you to the brilliant philosophers and authors who formed the rest of my committee, Dr. Everett Dolman and Dr. John Guilmartin. As I expected, they provided insights several layers deeper than what I had contemplated in my writing.

I also send a note of appreciation to the founders and staff of the Virginia Railway Express. The quiet, comfortable, 45-minute commute to and from work provided a very consistent opportunity to get this work done.

Finally, and most importantly, I thank my family for their love and support. Mom and Dad, both now retired schoolteachers, instilled in me a love for learning and made personal sacrifices to ensure I got the best education possible. My wife Nora has helped me center my priorities on family over the past 15 years, and for that I could not be more grateful. She also provides an incredible education to our three children at home. I could not afford the schooling she offers if I tried to find it outside the home; it is complete with a custom-made curriculum, one-on-one tailored instruction, and extensive opportunities to learn from experiences outside the books. She is an exceptionally qualified, credentialed, and experienced educator, and it is my privilege to watch the kids thrive—intellectually, spiritually, socially, and physically—under her care and tutelage. I also give thanks for my children: for their zeal, their positive attitudes, their curiosity, and their desire to learn, lead, and love.

## ABSTRACT

The idea that warfare is changing drastically has garnered significant attention over the past few decades. Some commentators contend that such change is revolutionary, that warfare is entering a new era. Indeed, many historians, sociologists, and even practitioners of warfare argue that the entire history of humankind is entering a new era. A plethora of descriptors exist to describe such change, including terms such as the information age, the end of history, fourth generation warfare, or the postmodern epoch.

Current events often serve as the basis for pundits to sound these calls of change. New technologies, developments in international politics, and changes in civil-military relationships seem to arrive quickly and promise unending alterations to society. However, a proper assessment of these developments must rely on a theory-based analysis. Furthermore, this assessment must be cognizant of great historical continuities in war and politics.

These diverse descriptors of change have certain elements in common that deserve such a rigorous analysis grounded in theory. Namely, they tend to include discourse about postmodernist relativism, post-nationalism, and post-industrialism. This discourse often revolves around the nature of conflict itself, changes in global politics and civil-military relations, and novel technological innovation.

Such changes can be more easily understood and assessed if they are bundled into a clear, coherent concept of postmodern warfare. Postmodern warfare clarifies the meaning of postmodernism and its war-related dimensions, and applies theory to current developments in order to understand them and make appropriate judgments. Postmodern warfare is comprised of identity-based politics, post-national global political structures, and post-industrial technology.

Despite ubiquitous clamors of revolutionary change, postmodern warfare is out of sight, beyond the horizon. Nonetheless, a clear understanding of what postmodern warfare is helps leaders develop a plan for action and decision.

## CONTENTS

### Chapter

	DISCLAIMER.....	ii
	ABOUT THE AUTHOR.....	iii
	ACKNOWLEDGMENTS.....	iv
	ABSTRACT.....	v
	CONTENTS.....	vi
	INTRODUCTION.....	1
1	POSTMODERN DISCOURSE.....	4
2	WARFARE.....	34
3	GLOBAL POLITICAL STRUCTURE.....	79
4	CIVIL-MILITARY RELATIONS.....	115
5	TECHNOLOGY.....	158
	CONCLUSIONS.....	194
	BIBLIOGRAPHY.....	202

## Introduction

### Background

United States Defense Department leaders prioritize funding to organize, train, and equip the force to execute a wide variety of missions in anticipation of future conflict. The spectrum of missions that the US military must prepare to execute ranges from peacekeeping and humanitarian operations to nuclear war. The shape of the future force depends in no small part upon what type of conflict they anticipate. Historically—despite evidence of a recurring need for a large, resilient, technology agnostic ground force—the US Department of Defense prioritizes funding for a smaller, more technology-centric force.

Numerous theories exist to explain key elements that result in such organizational behavior. For example, Allison's *Essence of Decision* explains critical national crisis responses; Huntington's *The Soldier and the State* describes how society shapes military policy and vice-versa; Waltz' *Theory of International Politics* explains the structure in which militaries operate that necessarily shapes state behavior. However, recent developments fit poorly into such theories. For example, an explanation of the US investment—with eight sovereign partner states—in the Joint Strike Fighter requires addenda or modifications to any one or more of these theories.

Some new theories have gained prominence over the past decade that may help to provide a coherent explanation for such anomalies. For instance, behavioral economics theory contends with Allison's rational actor model to explain decision making; Vlahos' identity theory supplements Clausewitz' theories in *On War* and Waltz' *Theory of International Politics* to describe changes in warfare and global political structure.

These theories address important, changing interrelated concepts—war, international relations, civil-military relations, and technology—that affect historians, academics, and military practitioners. To articulate the nature of such change, many commentators have engaged in conversations about postmodernism. A number of publications over the last decade have addressed the idea of a postmodern military. Common threads throughout these writings include changes in technology, changes in world-wide political structure, and changes in the relationship between the military and society. Unfortunately, the academic conversation about the postmodern military has not clarified or explained these changes in a wholly coherent manner.

### **Significance**

The humble purpose of this dissertation is to serve as a contribution to the conversation about the postmodern military in a manner that clarifies more than it obscures. To do so, I will propose uniting discussions of postmodern, post-national, and post-industrial conflict under one common header: *postmodern warfare*. I will apply emergent theories, such as behavioral economics and identity warfare theory, to help explain aspects of postmodern warfare. I will compare and contrast explanatory elements of postmodern warfare with traditional and modern theories to try to explain various contemporary behaviors. I have chosen particular anomalies that modern theoretical frameworks seem to explain poorly. These anomalies serve as case studies to test the idea that warfare has entered a postmodern era.

A clear analysis of the character of warfare today—through the lens of postmodernism—will illuminate certain aspects of future conflict for which senior defense leaders must prepare the armed forces. Regardless, if warfare today remains

more modern than postmodern, that conclusion does not negate the value of postmodern warfare as an ideal-type with which to assess change. Some academics, historians, and practitioners of warfare may even choose to advocate a move toward postmodern warfare.

### **Methodology and Structure**

The rest of the book is divided into six chapters. In the first, I focus on clarifying my proposal to amalgamate different assessments of change under the header of postmodern warfare. I review the concepts of postmodernism, post-nationalism, and post-industrialism and then introduce an analysis of their militarily-relevant union—postmodern warfare—along four dimensions. These dimensions—warfare, global political structure, civil-military relations, and technology—represent common topics across postmodern, post-industrial, and post-national literature.

In chapters two, three, four, and five, I address each of these dimensions in turn. In chapter two, I focus on warfare through both traditional and emerging theories to assess contemporary armed conflicts. In chapter three I turn to the global political structure—modern and postmodern. Chapter four contains a discussion of civil-military relations. In chapter five I discuss technology.

In the final chapter I present an assessment of the utility of my proposal, followed by an examination of implications. In this conclusion I discuss whether contemporary events are really anomalies at all, or if—instead—the application of the concept of *postmodern warfare* is premature.

# Chapter 1

## Postmodern Discourse

*In the normal course of events, political movements begin as intellectual arguments, often conducted for years in serious books and journals.*

-- Michael Gerson

### Background

Numerous military historians and academics have contributed to the ongoing, decades-long conversation about the postmodern military and postmodern warfare. Sociologist Charles Moskos rigorously applied the term to the military in the 1990s in his research, which he ultimately published as *The Postmodern Military: Armed Forces After the Cold War*.<sup>1</sup> US Military Academy professor Don M. Snider wrote of America's Postmodern Military in 2000.<sup>1</sup> Booth, Kestnbaum, and Segal argued in 2001 that the language of postmodernism, although useful, was being applied prematurely to military organization.<sup>2</sup> Douglas Kellner spoke of the Postmodern Military as the harbinger of permanent war under the Bush doctrine of "Preemptive War."<sup>3</sup> For Kellner, the defining element of postmodernism was the erosion of international institutions, laws, and norms that would eventually lead to a Hobbessian *Leviathan* state of international relations. Giuseppe Caforio included a chapter titled "The Military as a Tribe Among Tribes:

---

<sup>1</sup> Charles Moskos, "The American Soldier after the Cold War: Towards a Post-Modern Military?" *U.S. Army Research Institute for the Behavioral and Social Sciences*, Oct. 1998: 1; Charles C. Moskos, John Allen Williams, and David R. Segal, *The Postmodern Military: Armed Forces After the Cold War* (Oxford: Oxford UP, 2000).

<sup>1</sup> Don M. Snider, "America's Postmodern Military," *World Policy Journal* (2000): 47-9.

<sup>2</sup> Bradford Booth, Meyer Kestnbaum, and David R. Segal, "Are Post-Cold War Militaries Postmodern?" *Armed Forces & Society* 27.3 (Spring 2001): 319-42.

<sup>3</sup> Douglas Kellner, "Postmodern Military and Permanent War," *Masters of War: Militarism and Blowback in the Era of American Empire*, ed. Carl Boggs (New York: Routledge, 2003) 239.

Postmodern Armed Forces and Civil-Military Relations” in his *Handbook of the Sociology of the Military*.<sup>4</sup> Fabrizio Battistelli suggested postmodern motivation as one of the classes in a new typology of motivation for military service.<sup>5</sup> Even a simple search for the words postmodern military on Google scholar results in more than 99,000 books, journal articles, and references.<sup>6</sup>

Likewise, postmodernism, post-nationalism, and post-industrialism are topics of intellectual argument that may ultimately evolve into political movements as suggested by the Gerson quote at the start of this chapter. More importantly, they may become the sources of future conflict. I propose to bring them all under the heading of postmodern warfare to capture the relativism of post-nationalism and the high-technology of post-industrialism. My proposal centers on the term postmodernism, in a nod to the idea that societal discourse itself defines the meaning and scope of warfare and security. What follows is a small contribution to this historical discourse. My hope is only that it will be heard, understood, and contemplated by a handful of people whose actions and words help steer the conversation of human history.

## **Postmodernism**

### ***The Term***

The fact that a conversation about postmodernism exists does not mean all parties have the same meaning in mind. Consistent with its etymology, the very word postmodern invites a multitude of interpretations. Often, individuals perceive it in a

---

<sup>4</sup> Giuseppe Caforio, *Handbook of the Sociology of the Military* (New York: Springer, 2006) 167.

<sup>5</sup> Fabrizio Battistelli, “Peacekeeping and the Postmodern Soldier,” *Armed Forces & Society* 23.3 (Spring, 1997): 467-84.

<sup>6</sup> <http://scholar.google.com/scholar> 17 Apr. 2013.

similar manner as they would a word with religious connections—such as atheism or *anno domini*—some greet it with derision, others with appreciation and a sense of identification. Perhaps a majority of people simply acknowledge the word with confusion, or treat it as a synonym for high-tech or twenty-first century. Although it was only promulgated eighty years ago and brought into popular discourse in the late 1970s, the concept bears a rich history.

The term postmodern was first used in 1934 by Spanish writer Federico de Onis.<sup>7</sup> It was applied to a particular architectural style in the 1960s, but even then promised a much broader meaning and application. In his book *The Language of Post-Modern Architecture*, Charles Jencks foretold of postmodernism as a hybrid language with its own frame of reference and a wide metaphorical reach.<sup>8</sup> Thompson, in *Postmodernism and History*, interpreted Jencks' vision as a "shared symbolic order of the kind that religion provided."<sup>9</sup> Such foreshadowing eventually became valid, but not necessarily within the realm of architectural design. The term first had to travel through literary circles.

Postmodernism permeated literary criticism in the 1970s, and bore the claim that all writings, historical events, and other texts are indeterminate and subject to endless construal. In the postmodern view nothing has any meaning—or even exists—except as interpreted by particular people within a particular context. For example, a book has no meaning or significance until it undergoes interaction with a reader. The individual interpreting the text—instead of the words or events themselves—determines its meaning. As such, postmodernism in literary criticism diverged from modernism in that

---

<sup>7</sup> Willie Thompson, *Postmodernism and History* (New York: Palgrave Macmillan, 2004) 6.

<sup>8</sup> Charles Jencks, *The Language of Post-Modern Architecture* (Michigan: Rizzoli, 1984) 62.

<sup>9</sup> Thompson, *Postmodernism and History*, 6.

interaction with the observer became *the* crucial component in determining meaning. In effect, this concept introduced a profound relativism into popular culture, calling into question the idea of independent truth and the concepts of absolute good and evil.

### ***The Philosophy and Theory of Postmodernism***

In its most extreme form, postmodernism holds that events themselves do not meaningfully exist until they are given birth through language. However, as Thompson points out, a man who has been stabbed can feel the verity of the actual stabbing—he knows the event is real—before anyone bothers to say or write anything about it. Indeed, the very notion of an event requires that a context be supplied independent of the physical interaction of atoms that occurs in infinite succession throughout the universe. For example, the stabbing example above is an event about more than the interaction between a sharp object and flesh. The word stabbing presumes a stabber and some relationship between him and his victim. Appropriately, most historical literature written from the postmodern perspective today accepts the supposition of actual reality, although it gives central importance to discourse and language in creating meaning.

Following the trend in literary criticism, postmodernism as a social theory gained footing in the early 1980s, calling absolute values into question through the introduction of a profound relativism.<sup>10</sup> Postmodern social theory is a multifaceted set of explanations for a broad array of contemporary societal attributes. It encapsulates various terms such as the *information age*, *age of transparency*, *third wave of politics*, *end of history*, and *post-military society*. The term captures the idea that society is changing from the old industrial state to something vastly different. Val Rust characterized such disparate

---

<sup>10</sup> Moskos, *Postmodern Military*, 4.

labeling as part of the first phase of the discussion of postmodernism in the social sciences in the 1990s.<sup>11</sup> The second phase—a discourse that results in a more coherent and useful label—is yet to come, and the primary aim of this dissertation is to contribute to the current discussion.

Many social commentators have presented versions of postmodern theory. Charles Moskos highlights the relative weakening of the nation-state coupled with the growth of global social organizations.<sup>12</sup> Marshall McLuhan notes the importance of the shift from print to electronic media and equates it with the societal change wrought through the ascendancy of the phonetic alphabet in ancient Greece.<sup>13</sup> Alvin Toffler underlines the transfer from production-based to information-based economies.<sup>14</sup> Robert Reich adds the concomitant change in dominant occupation from producers to symbolic analysts.<sup>15</sup>

Jean Francois Lyotard was one of the first to shape the definition of postmodernism as a social theory. His primary contribution was to declare the death of metanarratives—the idea that history could be broadly understood or conceptualized according to some theme such as a directional or progressive march. More profoundly, the death of the metanarrative could be construed to deny any meaning to history. According to Lyotard’s view of postmodernism, historical events can be interpreted

---

<sup>11</sup> Val D. Rust, “Postmodernism and Its Comparative Education Implications,” *Comparative Education Review* 35.4 (Nov. 1991): 610-26.

<sup>12</sup> Moskos, *Postmodern Military*, 4.

<sup>13</sup> Marshall McLuhan, *Understanding Media: The Extensions of Man, Critical Edition*, ed. W. Terrence Gordon (Corte Madera, CA: Ginkgo Press, 2003) 118.

<sup>14</sup> Alvin Toffler, *The Third Wave* (New York: Bantam, 1984) 100.

<sup>15</sup> Robert B. Reich, *The Work of Nations* (New York: Alfred A. Knopf, 1991) 225.

endlessly for various contemporary purposes, but to ascribe some element of meaning or progress to recorded events is absurd.<sup>16</sup>

Thompson claimed that Lyotard's defining trait of the postmodern condition, specifically, is the loss of credibility of two predominant metanarratives: humanity as the heroic agent of its own liberation through the advance of knowledge (in the tradition of the French revolution); and spirit as the progressive unfolding of truth (in the German idealist school of thought).<sup>17</sup> In essence, Lyotard provided an intellectual basis for the contention that history is akin to poetry—useful to arouse certain emotions, feelings, and beliefs at the right time for a particular purpose, for a specific population—and nothing more. Historian Alun Munslow provided evidence for such a claim when he said “we are aware that we take simple verifiable statements, which we compose into a narrative so that they become meaningful (not necessarily the same as truthful).”<sup>18</sup>

Michel Foucault was another important voice in molding the early meaning of postmodernism in the social context. Contrary to Lyotard, he enumerated history according to what he called epistemes: discrete historical epochs in which a particular metanarrative dominated. Namely, he called out the classical period (1660-1800) and the modern period (1800-1950), dominated by the representative and the scientific frames of reference, respectively.<sup>19</sup> The postmodern period, to which Foucault argued humanity had moved, is dominated by a discursive frame of reference. In the postmodern period, Foucault “asserts the autonomy of discourse, that language has a power that cannot be

---

<sup>16</sup> Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge* (Minneapolis: University of Minnesota Press, 1984).

<sup>17</sup> Thompson, *Postmodernism and History*, 16.

<sup>18</sup> Alun Munslow, *Deconstructing History*, 2<sup>nd</sup> ed. (New York: Routledge, 1997) 149.

<sup>19</sup> Steven Best, “Foucault, Postmodernism, and Social Theory” *Postmodernism and Social Inquiry*, eds. David R. Dickens and Andrea Fontana (London: The Guilford Press, 1994) 25-28.

reduced to other things, either to the will of a speaking subject, or to economic and social forces, for example.”<sup>20</sup> In other words, the fundamental power of discourse itself defined the postmodern period. Similarly, Moskos distinguishes between the modern, late modern, and postmodern eras. In his view, the modern era dates from the Treaty of Westphalia to the end of World War II. The hallmarks of the modern era are the rise of the nation-state and the *levée en masse* of the French Revolution. Nonetheless, Foucault did not see progress between epistemes *per se*, only an alteration or refinement of the forms of domination that society constructs.<sup>21</sup>

Foucault elevated the importance of discourse as the primary element in the creation of a postmodern reality. To him, transitory epistemes defined the all-important frame of reference within which discourse created meaning. For example, he pointed to rationality and scientific inquiry as the frames of reference that dominated the modern period. Within that reference, discourse interpreted various social conditions to give them meaning—such as the interpretation of homosexuality, a condition that garnered Foucault’s personal interest, as a disease. In the postmodern episteme, as he sees it, man must recognize truth and knowledge as subjective elements that are socially constructed by one interest group for the purpose of domination over another.

Due to the prominence given to discourse in postmodern philosophy—discourse is central to the creation of reality itself—postmodernism is a less ideological and more humanist philosophy. In other words, persons who embrace the postmodern philosophy recognize that it is they who create reality and meaning through action, which can take

---

<sup>20</sup> Mark Kelly, “Michel Foucault (1926-1984)” *Internet Encyclopedia of Philosophy*, 11 Nov. 2010, online, Internet, 20 Sep. 2012. Available: <http://www.iep.utm.edu/foucault/#SH3d>.

<sup>21</sup> Michel Foucault, *Discipline and Punish: The Birth of the Prison* (New York: Knopf Doubleday, 1977) 155.

the form of oral or visual persuasion. However, akin to Huntington's characterization of reform liberalism prevalent in American society after World War II, postmodernism is really "composed of many elements frequently at odds with each other but with an underlying unity."<sup>22</sup>

Therefore, I propose the following defining statements of that underlying unity. Postmodernism is realist. It admits the prominence of interests ahead of glorifying ideals. It is Aristotlean more than Platonic in that its ideals do not have an independent, extra-mental substance, but exist in the stories of things. Postmodernism allows for the discursive creation of change among mankind: from duels to courts, from massive religious crusade-warfare to interstate warfare in which powers invest great sums to minimize destruction in the form of collateral damage. It does not, however, ascribe the term progress to such changes. They are merely points in time in an ever-changing conversation. It agrees with Voltaire that human suffering can be reduced through the elimination of fanaticism and superstition. It comports with Hume in that ultimately nothing can be known. It chooses not whether humanity is by nature good or evil. Instead, it can agree with Rousseau and Niebuhr (people are good, society corrupts) or Christian doctrine (humankind is fallen) at a whim. The postmodern philosophy eschews the perfection of any particular ideal or ideology in human beings, because the discourse can always change. Postmodernism is equally concerned with the relationship between individuals and states as with the relationship between states. These two interactions simply form two overlapping layers of discourse.

---

<sup>22</sup> Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, Mass: The MIT Press) 234.

E.H. Carr's *The Twenty Years' Crisis: 1919-1939* is an excellent work through which to understand the prospect of a postmodern world order. His analysis is grounded in realism and informed by idealism to arrive at a pragmatic synthesis. Carr wrote his book during the beginning of neo-liberal institutionalism. He recognized the tension between power (realism) and morality (utopianism), and suggested that it must be put to rest by including aspects of both.

Any international moral order must rest on some hegemony of power. But this hegemony...is in itself a challenge to those who do not share it; and it must, if it is to survive, contain an element of give-and-take, of self-sacrifice on the part of those who have, which will render it tolerable to the world community.<sup>23</sup>

Carr's contemporary, Bertrand Russell, agreed:

If an orderly procedure of peaceful change is ever to be established in international relations, some way must be found of basing its operations not on power alone, but on that uneasy compromise between power and morality which is the foundation of all political life.<sup>24</sup>

General Dwight D. Eisenhower's actions also provide a decent example of the pragmatism of postmodern philosophy. For example, the Advanced Study Group, General Eisenhower's three-man committee established in 1947 to make a long term estimate of the role of military operations in American foreign policy concluded articulately, "we should emphasize over and over that we desire friendly relations with all nations. We should have no objection to any nation's internal government so long as it learns to live peacefully in the world. We should clearly state that we are not fighting communism as such but are opposed to the imposition of communism upon nations. We

---

<sup>23</sup> E.H. Carr, *The Twenty Years' Crisis: 1919-1939* (New York: Perennial, 2001) 168.

<sup>24</sup> Carr, *Twenty Years' Crisis*, 220.

should take the position that democracy can exist peacefully and progressively in the same world with communism, socialism, and other ideologies.”<sup>25</sup>

Postmodern philosophy elevates the importance of discourse in representing, understanding, and creating reality. War historian John Lynn recognizes the crucial role of discourse and reality, and he based his book *Battle* on a cultural approach to war that examines the relationship between discourse, reality, and war. He appears eager to deliver an analysis consistent with a postmodern approach, but he finds the language of postmodernism off-putting and settles for the use of the word *discourse* as a major factor in shaping culture and its forms of war.<sup>26</sup> In addition to this primary aspect of postmodernism, another part of the conversation about the postmodern military involves post-nationalism, which I include as an element of postmodern warfare.

## **Post-nationalism**

### ***The Term***

In a 2008 speech in Berlin, Presidential Candidate Barack Obama contributed to the postmodernist conversation by introducing himself as a “citizen of the world.”<sup>27</sup> With such an introduction, he provided an example of one specific element of change that should be annexed into the postmodern warfare discussion: post-nationalism. Post-nationalism is the idea that the central political reality is changing from the current state system to something different. Unlike the nation-state, the dominant political unit in global politics since the Treaty of Westphalia, the new central political reality has been

---

<sup>25</sup> Morris Janowitz, *The Professional Soldier: A Social and Political Portrait* (Glencoe, IL: Free Press, 1960) 275.

<sup>26</sup> John A. Lynn, *Battle: A History of Combat and Culture* (Cambridge, MA: Westview Press, 2003) xix.

<sup>27</sup> Jeff Zeleny and Nicholas Kulish, “Obama, in Berlin, Calls for Renewal of Ties With Allies,” *New York Times* 25 Jul. 2008: A1.

variably professed to be humanity writ large, civilizations, corporations, or individuals, among others. Senator Obama's profession of allegiance to humanity was a step toward postmodern relativism and away from a strict adherence to the forms of power and dominance afforded the United States under an anarchic international world order.

After his election as President of the United States, he still maintained some level of loyalty to humanity in addition to his allegiance to the Constitution. In a 2009 speech in Cairo, he professed his belief that "the interests we share as human beings are far more powerful than the forces that drive us apart."<sup>28</sup> He cited the principles of justice, progress, tolerance, and human dignity as some of those uniting interests. The dividing forces include ideology, nationality, and geographic political boundaries. However, as the chief-executive of the most powerful geographic political entity, sworn to uphold its constitution, he was in less of a position to uphold common human interests than to defend the sovereignty of his state. Nonetheless, the President understood and employed the rhetoric of post-nationalism.

The notion of post-nationalism is older than twenty-first century politics, of course. Barbara Tuchman wrote in *The Proud Tower* of the power of universal ideas vis-à-vis states during the decades leading up to the World War I. One of the ideas that seemed to promise the replacement of the old order was the international movement. Dubbed *The International*, it was a group of people who believed that nations would someday give up their freedom to fight in exchange for the security of the rule of law. Its

---

<sup>28</sup> Barack Obama, The White House, Office of the Press Secretary, *Remarks by the President on a New Beginning*, 4 June 2009.

promise seemed universal, and its numbers were multiplying to the point that the movement declared “tomorrow The International will be the human race.”<sup>29</sup>

Nearly one-hundred years after the start of World War I, however, the ideas underlying post-nationalism are not sufficiently compelling so as to usurp the structure of the anarchic system of nation-states. Just a few years after the touted arrival of The International, Niebuhr assessed the power of post-national ideas as too weak: “what lies beyond the nation, the community of mankind, is too vague to inspire devotion.”<sup>30</sup> Nonetheless, the enduring concept of post-nationalism is a relevant component of postmodernism that deserves a more detailed analysis.

### ***Post-nationalist Relativism***

Post-nationalism fits into the discussion of postmodernism because it is founded on relativism and discourse. It gives power to the idea that loyalty to a particular state is not the highest ideal. It questions self-interested intervention, the use of state power to resolve conflict in favor of the intervener.

The dominant form of international discourse today falls somewhere on a spectrum between complete self-interest and idealism. In “From War and Peace to Violence and Intervention: Permanent Moral Dilemmas Under Changing Political and Technological Conditions,” Pierre Hassner draws on philosophical texts such as Kant’s *Eternal Peace* and J.S. Mill’s *A Few Words on Non-Intervention* to conclude that the security environment today is shaped less by international self-interest and more by a

---

<sup>29</sup> Barbara Tuchman, *The Proud Tower: A Portrait of the World Before the War (1890-1914)* (New York: Ballantine Books, 1962) 407.

<sup>30</sup> Reinhold Niebuhr, *Moral Man and Immoral Society: A Study in Ethics and Politics* (New York: Charles Scribner’s Sons, 1932) 91.

moral consciousness driven by social and economic change.<sup>31</sup> J. Bryan Hehir assesses those changes in the international political landscape over the past 30-50 years in the chapter entitled “Military Intervention and National Sovereignty.” Hehir draws attention to the fact that even Huntington, the father of modern civil-military relations theory, calls the increased political role of NGOs part of a “transnational revolution.”<sup>32</sup> In a *Foreign Affairs* article J. L. Gaddis characterized this revolution in terms of a change from the forces of freedom vs. totalitarianism to the forces of integration vs. fragmentation.<sup>33</sup> Carafano argued that private military contractors, for example, are an element of post-nationalism that represents a deep and significant change to, in his words, the very nature of warfare.<sup>34</sup> Because so many academics recognize such broad social change and its effect on warfare, I propose to bring this type of discussion about post-nationalism under the umbrella of characteristics that describe postmodern warfare.

The international conversation over the last few decades has shown a decline in the palatability of idealist intervention based on moral superiority. If truth and knowledge are subjective elements of domination, then one nation’s rationale for invading another is no more valid than its counterargument against invasion. In line with Foucault’s understanding of postmodernism, the metanarrative concepts of manifest destiny and white man’s burden fell out of favor in the nineteenth century among Western nations. The duty of the United States to spread democracy throughout the

---

<sup>31</sup> Pierre Hassner, “From War and Peace to Violence and Intervention: Permanent Moral Dilemmas Under Changing Political and Technological Conditions,” *Hard Choices: Moral Dilemmas in Humanitarian Intervention*, ed. Jonathan Moore (Lanham, MD: Rowan and Littlefield, 1998) 287; John Stuart Mill, “A few words on non-intervention,” *Fraser’s Magazine* LX (1859): 766; Immanuel Kant, *Eternal Peace and Other International Essays*, trans. W. Hastie (Boston: The World Peace Foundation, 1914) 100.

<sup>32</sup> Samuel Huntington, “Transnational Organizations and World Politics,” *World Politics* 25.3 (1973): 333.

<sup>33</sup> John Lewis Gaddis, “Toward the Post-Cold War World,” *Foreign Affairs* 70.2 (1991): 102.

<sup>34</sup> James Jay Carafano, *Private Sector, Public Wars: Contractors in Combat—Afghanistan, Iraq, and Future Conflicts* (Westport, CT: Praeger Security, 2008) 11.

world—a staple of American policy since the Spanish-American War—belongs in a bygone episteme. Indeed, author Mike Moore argues that duty to govern those who are unfit to govern themselves has died.<sup>35</sup>

On the other hand, John Stuart Mill's views on intervention represent a traditional, idealist approach. In principle he advocated intervention as a means to develop a less-civilized country. "It is moral for a civilized country to meddle (improve) a barbaric country,"<sup>36</sup> he said. However, pragmatic concerns mitigated his zeal for improving the lot of mankind, and led him to warn against intervention for the reason "that there can seldom be anything approaching to assurance, that intervention, even if successful, would be for the good of the people themselves."<sup>37</sup> He continued, for "if they have not sufficient love of liberty to be able to wrest it from merely domestic oppressors, the liberty which is bestowed on them by other hands than their own will have nothing real, nothing permanent."<sup>38</sup> Ultimately, he concluded, "a contest in which many have been called on to devote themselves for their country is a school in which they learn to value their country's interest above their own."<sup>39</sup> Therefore, Mill's contribution to the discourse was actually to advocate national self-determination, a phase in man's organizational development that falls short of post-nationalism.

Nonetheless, the postmodern citizen of the world attitude is not antithetical to Mill's philosophy. In fact, Mill considered modern state-centric motivations the most reprehensible: "of all the attitudes a nation can take upon the subject of intervention, the

---

<sup>35</sup> Mike Moore, *Twilight War: The Folly of U.S. Space Dominance* (Washington, DC: The Independent Institute, 2008) 243.

<sup>36</sup> John Stuart Mill, "A few words on non-intervention," *Fraser's Magazine* LX (1859): 766.

<sup>37</sup> Mill, "A few words," 258.

<sup>38</sup> Mill, "A few words," 259.

<sup>39</sup> Mill, "A few words," 260.

meanest and worst is to profess that it interferes only when it can serve its own objects by it.”<sup>40</sup> Interestingly, when Mill wrote these words the primary form of foreign intervention was to lend assistance to a foreign government in putting its people down. After all, many governments spent far more effort suppressing their own population than pursuing foreign interests. To make the point, Rudolf Rummel observed that in the twentieth century more people were killed by their own governments (about 150 million) than by all wars combined.<sup>41</sup>

Post-nationalism, as a component of postmodern warfare, recognizes the importance of principles that trump the sanctity of the nation-state. John Stuart Mill understood the importance of these ideas, as did another recent philosopher on war, Michael Walzer. In his book *Just and Unjust Wars*, Walzer points out that notions about right and wrong are remarkably persistent and morality in war is universally accepted.<sup>42</sup> For example, his study of warfare highlights that parties to warfare—over the course of centuries, and without exception—recognize the moral necessity to fight justly, with proportionality and discrimination. He did not argue that wartime leaders refrain from overstepping these lines, but that they tend to do so in a period of supreme emergency, after which they return. He defines the crimes of warfare as aggression, cruelty, and injustice, and that it is justified to go to war in order to counteract these crimes.

Although at first glance his dedication to moral principles that transcend the state—justice, proportionality, discrimination—appears post-national, Walzer’s underlying logic is unequivocally nationalistic. His understanding of a period of supreme

---

<sup>40</sup> Mill, “A few words,” 243.

<sup>41</sup> Rudolf Rummel, *Death by Government* (New Brunswick, NJ: Transaction Publishers, 1994) 3.

<sup>42</sup> Michael Walzer, *Just and Unjust Wars: A Moral Argument with Historical Illustrations*, 4<sup>th</sup> ed (New York: Basic Books, 2006) 16.

emergency is a moment in which the survival of the state is threatened. For instance, he employs the Combined Bomber Offensive (CBO) as an example of a supreme emergency. During the CBO, Winston Churchill authorized the indiscriminant bombing of German cities. Such an act of aggression enabled the survival of the British state, to say nothing of Mr. Churchill's seat of power. In this formulation, the supreme emergency clarifies the highest value: the survival of the state. The sanctity of the state trumped all other principles.

Post-nationalism requires a dedication to a set of principles that transcends self-interest and survival. Mill's arguments, on the whole, do not advocate the subjugation of national will to universal principles of justice. Nor do Walzer's arguments support such a dedication. Walzer supports intervention in three specific cases—to assist in a just secession, to counterbalance foreign intervention in a civil war, and to end a massacre—but his views mesh more closely with Mill than he recognizes.<sup>43</sup> According to Endre Begby, in his article “Liberty, Statehood, and Sovereignty: Walzer on Mill on Non-intervention” in the *Journal of Military Ethics*, “from a closer reading of Mill is likely to emerge a picture of international political morality that is closer to Walzer's present views on the subject than Walzer himself might like to admit.”<sup>44</sup>

Today, intervention (by industrialized nations, at least) is often for humanitarian purposes. For example, Bernard Kouchner—a doctor and cofounder of Doctors Without Borders who also served as French Foreign Minister during the Sarkozy administration—popularized the idea of a “right to intervene” in other countries for humanitarian

---

<sup>43</sup> Walzer, *Just and Unjust Wars*, 101.

<sup>44</sup> Endre Begby, “Liberty, Statehood, and Sovereignty: Walzer on Mill on Non-intervention,” *Journal of Military Ethics* 2.1 (Jan. 2003): 46.

reasons.<sup>45</sup> Accordingly, academics note a societal shift from self-interested intervention to something fundamentally different. For example, Michael Ignatieff highlights the social evolution of universal empathy through changing metanarratives in the media: from imperialism, to the Cold War, to chaos, to humanitarianism.<sup>46</sup> It remains unclear whether a strict postmodernist would reject such an analysis based on metanarratives (as might Lyotard), or concur with something so similar to epistemes (such as Foucault).

### ***The Inclusion of Post-nationalism as part of Postmodern Warfare***

Post-nationalism belongs as an element of postmodern warfare for two reasons. First, it is an increasingly important part of the discourse of human affairs. Its inclusion in recent Presidential speeches and philosophical treatises demand that post-nationalism be addressed in this assessment. Furthermore, military intervention in foreign affairs today is often more agreeable if it is couched in principles other than self-interest.

## **Post-industrialism**

### ***The Term***

The third component of postmodern warfare is post-industrialism. Post-industrialism is related most closely to technology and its role in human affairs. I propose to include it as a part of postmodern warfare in an effort to add clarity to an otherwise interesting—but not entirely coherent—aspect of future warfare.

When applied imprecisely, some individuals consider postmodern to be akin to futuristic, and so assume many contemporary assessments of social change and

---

<sup>45</sup> Edward Cody, "Syria Weighs Heavily on France," *Washington Post* 11 Sep. 2012: A8.

<sup>46</sup> Michael Ignatieff, "The Stories We Tell: Television and Humanitarian Aid," *Hard Choices: Moral Dilemmas in Humanitarian Intervention*, ed. Jonathan Moore (Lanham, MD: Rowman and Littlefield, 1998) 287.

technological change trend toward postmodern. For example, a student interested in the postmodern military might also look into books and articles about the post-industrial military, or about future warfare in general. Books of interest might include *The Army After Next*, and *Wired for War*, for instance.

Thomas Adams' book *The Army After Next* is subtitled *The First Postindustrial Army*. He was not the first to contribute to this topic; Adams joined an ongoing conversation about the post-industrial military. Antulio Echaverria and John Shaw wrote "The New Military Revolution: Post-Industrial Change" in 1992. They opened with an appraisal of the military revolution that occurred between 1560 and 1660, when, according to historian Michael Roberts, Gustavus Adolphus' combination of linear formations and increased firepower revolutionized tactics, created new strategic possibilities, and led to the need for larger standing armies and the political and social institutions to supply and support them.<sup>47</sup> Following such a bold introduction, they went on to argue that warfare had begun to undergo revolutionary change since the end of the industrial age. Echevarria and Shaw viewed the early 1990s as the start of a new historical era:

To be sure, a new historical era—whether it is called the "Post-Industrial Age," the "Space Age," the "Computer Age," or the "Age of the Electronic Revolution"—has begun to replace the low-cost, mass-production-oriented industrial age which influenced warfighting up to the 1960s and early 1970s.<sup>48</sup>

The military-related conversation sprung from a discussion about post-industrial society popularized in the early 1970s by sociologist Daniel Bell in his work *The Coming of Post-industrial Society*. Post-industrialism was originally conceived as an economic

---

<sup>47</sup> Antulio Echevarria and John M. Shaw, "The New Military Revolution: Post-Industrial Change," *Parameters*, Winter (1992-93): 70.

<sup>48</sup> Echevarria and Shaw, "New Military Revolution," 71.

term that described the overtaking of the manufacturing sector of the economy by the service sector.<sup>49</sup> The rise in the service economy stems from the increasing value of human knowledge in what is sometimes referred to as an information society.

The information society, or network society, is a caricature of the role computer and network technology has taken in modern times. Its effect on warfare, which remains to be demonstrated, deserves an inclusion in a discussion of postmodern warfare.

### ***Technology***

Technology belongs to this concept of postmodern warfare because of the power of technology as a discursive element in the affairs of humankind. The influence of technology throughout history falls somewhere along a spectrum: from technological determinism to social constructivism.

Technological determinism, on one extreme of the spectrum, holds that technology drives history. Smith notes that “A sense of technology’s power as a crucial agent of change has a prominent place in the culture of modernity.”<sup>50</sup> He goes on to point out that human knowledge of the role of technology is fundamental to a person’s existence. People see technology changing the texture of their daily lives, rather than read about its power as some sort of abstract idea. Under such circumstances, they formulate their own theories about the role and power of technology, and apply those personal theories to more complex scenarios, such as the role of technological innovation in warfare or international affairs. Heilbroner, perhaps a more tempered technological determinist, views technological artifacts as a mediating factor in socioeconomic history.

---

<sup>49</sup> Daniel Bell, *The Coming of Post-industrial Society* (New York: Harper Collins, 1974) 88.

<sup>50</sup> Merritt Roe Smith and Leo Marx, *Does Technology Drive History? The Dilemma of Technological Determinism* (Cambridge: The MIT Press, 1994) 111.

Nonetheless, he argues that they have a striking impact on the political course of history, as evidenced by the technology of war.<sup>51</sup>

On the other end of the spectrum exist the social constructivists. Social constructivists hold that people predominantly drive the course of history vis-à-vis technological advancements, through their decisions to adapt and socialize specific technologies. Bijker, a proponent of social constructivism, contends that people adopt certain technological innovations based not upon any inherent characteristics of the technology itself, but upon the relationship between the technology and the society considering its adoption.<sup>52</sup> A society—complete with its often illogical and incoherent preferences and traditions—frames the criteria against which new technologies are judged. Certain powerful groups participate in the discourse that defines these criteria, and less powerful groups are often excluded, although they still bear the consequences of some of the technologies that are adopted.

It is without question that technology plays some role in the discourse that is human history. A complete characterization of postmodern warfare must include some discussion of its role and significance.

### **Cognitive Framework for Analysis**

A sociologist who rigorously studies the postmodern movement will no doubt object to my proposed use of the term postmodern, as it invites some elements into the discussion that are not integral to postmodern social theory *per se*. This risk is counterbalanced by the benefit that a more inclusive definition increases the number of

---

<sup>51</sup> Robert Heilbroner, “Do Machines Make History?” *Technology and Culture* 8.3 (Jul. 1967): 335.

<sup>52</sup> Wiebe E. Bijker, Thomas P. Hughes, and Trevor Pinch, *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology* (Cambridge: The MIT Press, 1987) 17.

interested researchers. A greater number of interested parties, in turn, will lead to a more useful theory with which to understand the social and technological changes that so many individuals have observed in the military.

The three themes above—postmodernism, post-nationalism, and post-industrialism—can be united under the header of postmodern warfare. They each represent a topic of historical conversation that combine to create a potential reality. The very idea of reality, or truth, however, seems to run counter to the profoundly relativistic nature of postmodernism. Therefore, I must address two fundamental concepts before I proceed. First, what is truth? Second, what is theory? If I choose not to address these two subjects, postmodern social theorists can claim that I have done nothing more than provide another voice in the infinite discursive universe that seeks to make meaning out of ultimately meaningless artifacts. Ironically, by presenting a concept that I propose as truth, I diverge from the very nature of postmodernism itself. Paradoxically, I appropriate the language of a movement that disavows the existence of truth in order to create something true, or useful.

### ***A Philosophy of Truth***

Numerous theories address the concept of truth.<sup>53</sup> Thomas Aquinas believed in an ontological truth, or a truth based in things. In his *Summa Theologica*, he reiterated Aristotle's idea that truth is the conformity of the intellect to the things.<sup>54</sup> Nietzsche proposed something closer to a postmodern relativist theory of truth:

Nietzsche rejects the idea of universal constants, and claims that what we call "truth" is only "a mobile army of metaphors, metonyms, and

---

<sup>53</sup> Michael Williams, "Truth," *Encyclopedia of Philosophy* (New York: Macmillan, 1996): 572-3.

<sup>54</sup> Thomas Aquinas, *Summa Theologica*, ed. Kevin Knight, trans. Fathers of the English Dominican Province (2008), online, Internet, 4 Jan. 2013. Available <http://www.newadvent.org/summa/1016.htm>

anthropomorphisms.” His view at this time is that arbitrariness completely prevails within human experience: concepts originate via the very artistic transference of nerve stimuli into images; “truth” is nothing more than the invention of fixed conventions for merely practical purposes, especially those of repose, security and consistence.<sup>55</sup>

Foucault used the phrase “regimes of truth” interchangeably with his concept of epistemes, periods in which a powerful group defined a particular story as “truth” for its own purposes.<sup>56</sup>

Some of these theories distinguish between facts and truth. According to deflationary theories, for example, facts are data that can be observed and communicated unequivocally according to simple protocols. For example, it is a fact in mathematical language that the numeral 4 represents one less than the numeral 5. The British mathematician and philosopher Frank Ramsey argued that the words fact and truth are nothing more than linguistic methods of discourse, tools to make an argument.<sup>57</sup> Facts do not have meaning outside their own symbolic language. This proposition is the essence of Gödel’s proof, which is analogous to the statement “this sentence is false,” which can neither be proven true (for then it is false) nor false (for then it is true).<sup>58</sup>

Most understandings of truth, on the other hand, attempt to give contextual meaning to facts. Truth comes in two varieties: *simple human truths* and a *universal truth*. Simple human truths are socially constructed and change with the acceptance of new information. Universal truths exist separate from human understanding.

---

<sup>55</sup> Robert Wicks, “Friedrich Nietzsche - Early Writings: 1872-1876,” *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta (2008): 345.

<sup>56</sup> Michel Foucault, *Discipline and Punish: The Birth of the Prison* (New York: Knopf Doubleday, 1977) 9.

<sup>57</sup> F. P. Ramsey, “Facts and Propositions,” *Aristotelian Society Supplementary* 7 (1927): 153.

<sup>58</sup> Douglas R. Hofstadter, *Gödel, Escher, Bach: An Eternal Golden Braid* (New York: Basic Books, Inc., 1979) 17.

Paradoxically, the postmodernist claim that a universal truth does not exist—that all truth is socially constructed—is a belief in a particular universal truth.

Simple human truths are stories that arrange facts to explain phenomena and enable the accomplishment of something useful. For example, it is a simple human truth that the Earth orbits the sun (despite the fact that such a story directly contradicts our sensory perception that the sun moves around a stationary Earth). This story, an understanding of various conflicting observations of celestial bodies, enables useful actions such as launching satellites and landing on the moon.

On the other hand, the simple human truth one thousand years ago was that the Earth was the center of the universe. This ancient story adequately accounted for the myriad of human observations about celestial bodies. The Earth stood still, the sun and moon and stars moved predictably. A dedicated postmodernist might contend that neither of these stories necessarily equate to a universal truth, because truth does not exist. Instead, these are just two examples of endless reinterpretation of the texts of quotidian events.

Today, those of us who hold the modern view as truth (Earth as a satellite of the sun) do not believe that anything about the physical relationship between Earth and sun changed over the last millennium. Rather, we understand that the society that constructed the earlier truth (Earth as the center of the universe) did not have the capacity at the time to observe and accommodate so many other facts that contradicted its belief. Rationalists believe that our ancestors were mistaken, and did not know the fundamental truth. Postmodernists deny the existence of a universal truth and instead believe that there are

many facts that even we do not yet have the capacity to observe; so to consider our present beliefs as truth is folly.

The universal truth is a story that attempts to tie together the whole of human experience in some coherent manner. Unlike simple human truths, the universal truth cannot be verified empirically. Any story that claims to represent the universal truth is mutually exclusive with any other such story. Logically, only one universal truth can exist.

Ultimately, the universal truth always rests on a belief. This belief can take the form of a religious story—as is the case in Christianity, Judaism, Hinduism, Buddhism, and Islam, to name but very few examples—or it can hold that chance and randomness sufficiently explain everything—as is the belief in atheism. Agnosticism, on the other hand, maintains no interest in any universal truth. Agnostics consider the pursuit of simple human truths compelling enough that no story needs to attempt to explain everything. In their view, those questions that require such a story as an answer—existential questions such as “why does humankind exist?” or “what is the purpose of life?”—provide a meaningful intellectual journey, but cannot be answered satisfactorily.

The postmodernist view tends closer to agnosticism, yet with an interesting story that tries to “make sense” of the whole human experience. To a postmodernist, the most compelling story to explain human history is the belief in the power of the narrative itself. Whereas other beliefs try to create a story that conforms to artifacts like historical recordings and scientific observations—a truth based in things—the postmodern universal truth focuses away from these artifacts. Instead, postmodernism creates a story that conforms to changing historical narratives. It is a truth based in stories.

Postmodernists recognize society's role in formulating and propagating stories to arrange facts for a particular contemporary purpose. To Foucault, the purpose of generating such stories was to acquire or increase power. The power of the group that presents any given interpretation determines which interpretation becomes the socially accepted truth. Over time, the powerful define truth in society. More prestigious worldviews offer greater power. Today, C.H. Gray contends that science is the most prestigious worldview.<sup>59</sup> Indeed, nearly all ideologies seek to attain its approbation. The discourse that produces this ever-changing truth—the play for power by various human factions and worldviews—is the essence of postmodernism. Michel Foucault argued in the “Regime of Truth” that society, technology, and institutions construct all socially accepted truth.<sup>60</sup>

Numerous philosophers have taken advantage of this open discourse. In *Thus Spake Zarathustra*, Nietzsche observed this essence of postmodernism and then sought to steer the conversation in a direction compatible with his belief in the supremacy of man. In the chapter entitled “The Thousand and One Goals” he focuses squarely on relativism. Zarathustra notes that in his travels he has seen a thousand different cultures and thus a thousand different things that each thinks of as variably good or bad, with little consistency across cultures. “There is lacking the one goal. As yet humanity hath not a goal. If the goal of humanity be still lacking, is there not also still lacking—humanity itself?”<sup>61</sup> After noting the relativism, he steers to his truth. Man must reject this

---

<sup>59</sup> Chris Hables Gray, *Postmodern War: The New Politics of Conflict* (New York: The Guilford Press, 1997) 228.

<sup>60</sup> Foucault, “Regime of Truth,” *Power/Knowledge: Selected Interviews and other Writings* (New York: Pantheon Books, 1980) 133.

<sup>61</sup> Friedrich Nietzsche, *Thus Spake Zarathustra*, trans. Thomas Common (New York: The Modern Library, 1999) 62.

relativism and unite under one common goal: excellence. Nietzsche returns consistently to a central theme: the rejection of the concepts of good and evil.<sup>62</sup> Instead, man must simply surpass himself and strive after work, not happiness.<sup>63</sup>

Nietzsche's direct counter came from Reinhold Niebuhr, who tried to direct the discussion his way in *Moral Man and Immoral Society*: "equality, or to be a little more qualified, equal justice is the most rational ultimate objective for society."<sup>64</sup> Niebuhr distilled this sense of the absolute—the idea that some values are more important than others—as the essence of religion.<sup>65</sup>

Pierce defined truth as the opinion that is fated to be ultimately agreed upon by those who follow the scientific method.<sup>66</sup> Pierre Bayle gave voice to an early iteration of postmodernism, proclaiming that since no beliefs can be proved true or false all should be tolerated.<sup>67</sup> Historian Janet Abu-Lughod challenges the Kuhnian notion of "real truth" derived from the "real world." Instead she asserts that anomalous findings can arise from what is in the observer as well as what is to be observed. Abu-Lughod takes "the more relativistic view [which] assumes that scientific knowledge is socially constructed... [and that] knowledge is not some disembodied product isomorphic with the world but rather is produced through collective definition, that is, it represents transient human 'consensus about the world.'"<sup>68</sup>

On the surface, postmodernism is like Gödel's incompleteness theorem: if postmodern philosophy is universally true, then it is false (for it rejects a universal truth).

---

<sup>62</sup> Nietzsche, *Zarathustra*, 225.

<sup>63</sup> Nietzsche, *Zarathustra*, 368.

<sup>64</sup> Niebuhr, *Moral Man and Immoral Society*, 234.

<sup>65</sup> Niebuhr, *Moral Man and Immoral Society*, 52.

<sup>66</sup> Ian McGreal, *Great Thinkers of the Western World* (NY: Harper Collins Publishers, 1992), 399.

<sup>67</sup> McGreal, *Great Thinkers*, 243.

<sup>68</sup> Janet L. Abu-Lughod, *Before European Hegemony: The World System A. D. 1250-1350* (New York: Oxford UP, 1989) vii.

However, postmodernism holds a belief in a truth based not in things, but in narratives. The postmodern universal truth holds that powerful groups determine the story that people believe. Many stories exist across many different cultures, and stories change over time. Ultimately, any fundamental truth rests on a belief, and men and women who act on their beliefs drive the discourse of history closer to what they believe, which in the postmodernist view creates the truth anyway.

### ***Truth and Human Perception***

The trouble is that humans drive the discourse of events, and human brains are fraught with biases and heuristics that render their beliefs inappropriate or even counterproductive. In *Thinking, Fast and Slow*, Daniel Kahneman describes how people construct their beliefs from heuristics that are often wrong.<sup>69</sup> For example, he tells the story of a group of instructor pilots who have come to the conclusion after years of experience that to praise a student pilot decreases his performance, but to berate a student pilot improves it. Their conclusion came not from empirical evidence, but from a misattribution of the law of regression to the mean. Instead of recognizing that a superb (or a horrendous) performance is likely to be followed by something closer to an average performance, they attributed the change in performance to the cause and effect of their instruction. The law of regression to the mean states that in a normal distribution of events an outlier is highly probable to be followed by a regression toward the mean of the distribution. Therefore, instructor pilots who had witnessed an outstanding performance would most likely witness a worse performance next, regardless of what sort of instruction they provided. They tended to praise a good performance, and then noticed

---

<sup>69</sup> Daniel Kahneman, *Thinking, Fast and Slow* (New York: Farrar, Straus, and Giroux, 2011) 87.

the apparent decrease in skill. On the other hand, those who had witnessed a very poor performance were about to witness an improvement regardless of their instruction. They tended to berate the student, note the improved performance, and misattribute the improvement to their berating. Niebuhr commented “Such is the inclination of the human mind for beginning with assumptions which have been determined by other than rational considerations, and building a superstructure of rationally acceptable judgments upon them, that all this can be done without any conscious dishonesty.”<sup>70</sup>

William James asserted that consciousness is not passive, it concentrates on some things and ignores others.<sup>71</sup> This active consciousness derives from unconscious heuristics and leads to ideas and beliefs, that are simply plans for organizing and structuring experience. Ideas, beliefs, and all stories that lay claim to truth attempt to explain, categorize, and anticipate phenomena. This is the purpose of theory.

### ***The Importance of Theory***

Economist Friedrich A. Hayek summed up the connection between facts and theory brilliantly: “Without a theory, the facts are silent.”<sup>72</sup> All knowledge is theory-based. Human knowledge about the most simple things—a chair, a table—rests on a theory about those simple things. For example, a theory about a chair contains aspects of approximate size, shape, structure, feel, smell, location, color, and many other things. People are able to test the validity of their theory of a chair regularly, and make changes to their theory based on the sensory inputs they receive. They receive regular feedback as to how robust their theory of a chair is every time they walk into a room full of a type of

---

<sup>70</sup> Niebuhr, *Moral Man and Immoral Society*, 214.

<sup>71</sup> McGreal, *Great Thinkers*, 402.

<sup>72</sup> Leslie Marsh, *Hayek in Mind: Hayek's Philosophical Psychology* (Bingley, UK: Emerald Group Publishing Limited, 2011) 5.

chair they have never seen, fit it into their theory of a chair, sit in it to confirm their theory, and experience the social confirmation of their theory as the people around them do the same.

Although a toddler's theory of a chair might only include the family's kitchen set, a 30-year old adult has made hundreds of adjustments to his theory of a chair, and is unlikely to encounter a chair of nearly any shape, size, or texture that he does not recognize as a chair...unless, however, the person categorizes the chair into another schema, or pre-existing set of beliefs. For example, a large rubber ball might be sold and used as a chair, but the person might, at first glance, apply his theory of rubber balls to the object instead of applying his theory of chairs.

Human learning depends upon the creation and adjustment of theories. In fact, human perception requires that the objects and phenomena to be perceived must fit into an existing theory. Otherwise, they simply are not perceived.<sup>73</sup> For example, it takes human infants approximately three months to begin to focus on a human face, one of the first visual stimuli human beings are able to perceive. Their inability to focus on an object sooner than that does not stem from an undeveloped optical system. The baby's lens and retina are already highly developed and specialized. Instead, the visual cortex of the brain has not developed through a sufficient number of repeated stimuli enough for the child to form a theory, or belief, or expectation of what a face looks like.

Without a theory into which to fit their sensory perceptions, the world is one great "blooming, buzzing confusion," as nineteenth century philosopher William James

---

<sup>73</sup> Robert Jervis, *Perception and Misperception in International Politics* (Princeton: Princeton UP, 1976) 143.

stated.<sup>74</sup> The same is true for more complex phenomena, such as human behavior and history. Without a rigorous theory into which to fit and test sensory perceptions, the world of events is a blooming, buzzing confusion.

Waltz provides a more technical examination of theory, which he calls a mental picture of reality.<sup>75</sup> In his view, reality is understood as a sequence of causation and effect. A law, in the scientific sense, is a statement that “if A, then B, with probability X.”<sup>76</sup> Waltz goes on to reject the notion that a theory is built up from a collection of interrelated laws. Such a collection leads to the inductivist illusion that the amassing of facts creates a generalized picture of reality.<sup>77</sup> Instead, he proposes that a theory is a set of statements that explain a collection of interrelated laws.<sup>78</sup> Theories are composed of theoretical notions, which can be concepts—like force—or assumptions—such as the concentration of mass at a point. These theoretical notions do not explain or predict, but they help establish a model, which represents a theory or orders a simplified reality.<sup>79</sup>

According to Professor Hal Winton, theory performs five functions for the historian: to define, explain, categorize, connect, and anticipate. The soul of theory is explanation. It is born of experience and a critical analysis of other theories.<sup>80</sup> In the study of history, the purpose of theory is to make the future better by educating the minds of leaders. Samuel Huntington argues that a good measure of a theory is the degree to which it encompasses and explains facts better than other theories.<sup>81</sup>

---

<sup>74</sup> William James, *Principles of Psychology* (New York: Henry Holt & Company, 1890) 488.

<sup>75</sup> Kenneth N. Waltz, *Man, the State, and War* (New York: Columbia UP, 1954) 8.

<sup>76</sup> Waltz, *Man, the State, and War*, 1.

<sup>77</sup> Waltz, *Man, the State, and War*, 4.

<sup>78</sup> Waltz, *Man, the State, and War*, 8.

<sup>79</sup> Waltz, *Man, the State, and War*, 7.

<sup>80</sup> Hal Winton, “Why Theory?” *Foundations of Military Theory* (Montgomery, AL: School of Advanced Air and Space Studies, 2009) 1.

<sup>81</sup> Huntington, *The Soldier and the State*, iii.

## Conclusion

In the following chapters I propose more of a concept than a theory, because it remains to be determined whether it is useful to define, explain, categorize, connect, and anticipate events. In the remainder of this manuscript I seek to clarify the concept of *postmodern warfare*, a combination of postmodern, post-national, and post-industrial aspects of contemporary discourse. I do so along four specific dimensions: warfare, global political structure, civil-military relations, and technology. I relate each of these dimensions to the postmodern cognitive framework, comparing the utility of postmodernist ideas—truths based in stories—to modern ideas—truths based in things. These aspects and dimensions of postmodernism, as they relate to conflict and warfare, form a mental picture of reality.

## Chapter 2

### Warfare

*The means of security can only be regulated by the means and danger of attack.*

*-- George Washington*

*Of all the enemies to public liberty, war is, perhaps, the most to be dreaded because it comprises and develops the germ of every other. War is the parent of armies, from these proceed debts and taxes. ...No nation could preserve its freedom in the midst of continual warfare.*

*-- James Madison*

*For everyone there always exists by nature an undeclared war among all cities.*

*-- Plato*

### Background

In the 2000 election cycle, presidential candidate George W. Bush condemned the Cold War “industrial age” military and promised armed forces for “information age battles.”<sup>1</sup> He also condemned peacekeeping and nation-building operations and promised to stop “vague” missions of the sort. Notwithstanding the fact that his terms as commander-in-chief were defined by two simultaneous, massive nation-building efforts (testament to the idea that political leaders rarely get the war they hope for), he clearly believed that warfare had entered, or was about to enter, a new era.

He was not alone in his assessment. Chris Gray put it this way:

For the last half of this century it has been clear that war is changing fundamentally. The more insightful observers have noticed the implications of high-tech weapons, especially computers, and the permanent military mobilization that has existed since 1945. They have

---

<sup>1</sup> Thomas Adams, *The Army After Next: The First Postindustrial Army* (Westport, CT: Praeger Security International, 2006) 95.

called this new type of war many things, among them: permanent war (Melman, 1974), technology war (Possony and Pournelle, 1970), high-technology war or technological war (Ewards, 1986c), technowar or perfect war (Gibson, 1986), imaginary war (Kaldor, 1987), computer war (Van Creveld, 1989), war without end (Klare, 1972), Militarism USA (Donovan, 1970), light war (Virilio, 1990), cyberwar (Davies, 1987; Der Derian, 1991; Arquilla and Ronfeldt, 1993), high modern war (Der Derian, 1991), hypermodern war (Haraway, personal communication, 1991), hyperreal war (Bey, 1995), information war, netwar (Arquilla and Ronfeldt, 1993), neocortical warfare (Szafranski, 1995), Third Wave War (Toffler and Toffler, 1993); Sixth Generation War (Bowdish, 1995), Fourth Epoch War (Bunker, 1995), and pure war (Virilio and Lotringer, 1983).<sup>2</sup>

Thomas Adams, in *The Army After Next*, also compiled a list of terms to describe types of conflict that did not quite fit the traditional mold of modern warfare:

Small wars, guerilla wars, irregular wars, unconventional wars, three-block wars, insurgencies and counterinsurgencies, constabulary operations, stability operations, stability and reconstruction operations, postconflict operations, small-scale contingencies, stability and support operations, wars of the third kind, fourth generation warfare, peacekeeping, or peacemaking, or peace enforcement, Chapter VI or VII (of the UN charter) operations, military operations other than war, and low-intensity conflict, among others.<sup>3</sup>

Some analysts questioned whether the traditional distinction between war and “not war” or “other than war” even matters. Metz and Cuccia point out that the distinction is more important for the neo-liberal than for the realist:

Debate over whether the United States is currently at war reflects a broader and deeper divide between a neo-liberal and realist approach to statecraft. For a neo-liberal, distinguishing war from “not war” matters greatly. The objective is to develop institutions and processes which diminish war to the maximum extent possible. War occurs because of flaws in international institutions and conflict resolution processes. To a neo-liberal, the existence of war implies that institutions and processes need strengthening. For a realist, what matters is the preservation and augmentation of national power. Distinguishing war and “not war” is unimportant. Strategy should reflect the convergence of rules and power

---

<sup>2</sup> Chris Hables Gray, *Postmodern War: The New Politics of Conflict* (New York: The Guilford Press, 1997) 22.

<sup>3</sup> Adams, *Army After Next*, 15.

rather than some updated or revised definition of war. As it has been for at least a century, America is torn between these two perspectives.<sup>4</sup>

Additionally, in February 2013, Secretary of Defense Leon Panetta authorized the creation of the Distinguished Warfare Medal to honor troops for extraordinary cyber-operations or drone strikes in which the combatant is geographically distant from the action. He said the new award “recognizes the changing face of warfare.”<sup>5</sup> This potential artifact of postmodern warfare, however, proved premature. Secretary of Defense Chuck Hagel cancelled that award in April of the same year.<sup>6</sup>

As these authors and politicians recognized, something about the character or nature of warfare was changing. However, these musings do not adequately address the question: has warfare entered a new era; is current conflict—whether it goes by the name war or one of the dozens of new monikers—postmodern? Forthwith is a new interpretation. Recall the three components of postmodernism: postmodern discourse, post-nationalism, and post-industrialism.

Is warfare postmodern in the first sense? That is, does discourse create a perception of truth or reality? To expand, does some *a priori* truth based in things—balance of power, rational actor states’ political will, or threat capability, for example—explain singular observable outcomes, or is the nature of the conversation itself—the “securitization” of particular topics for some other discursive purpose—responsible for a multitude of results, some of which we are predisposed to perceive? For example, is the United States’ reduction of ground troop levels the result of a rational calculation of

---

<sup>4</sup> Steven Metz and Phillip Cuccia, “Defining War for the 21<sup>st</sup> Century” *2010 SSI Annual Strategy Conference Report* (Carlisle, PA: Strategic Studies Institute, 2011) 13.

<sup>5</sup> Ernesto Londono, “Medal to honor troops for cyber-ops, drone strikes,” *Washington Post* 14 Feb. 2013: A9.

<sup>6</sup> Jim Garamone, “Hagel Replaces Distinguished Warfare Medal With New Device” *Defense.gov* 15 Apr. 2013, online, Internet. Available: [www.defense.gov/news/newsarticle.aspx?id=119778](http://www.defense.gov/news/newsarticle.aspx?id=119778).

anticipated risk or simply the expression of our national identity, which involves a preference for advanced technological conflict with an adversarial near-peer state?

Is warfare postmodern in the second sense? Are contemporary conflicts post-national? Was intervention in Libya, but not Syria, the outcome of international processes and institutions like the United Nations and the North Atlantic Treaty Organization? Or, on the other hand, were state rational actors using such institutions for their own political gain in the more traditional, modern formulation of international affairs? Which of these formulations would qualify as postmodern: the neo-liberal institutional model or the discourse of *realpolitik*?

Finally, is warfare postmodern in the third sense? Is warfare conducted through post-industrial means? Are contemporary cyber-attacks examples of conflict in which industrial capacity and capability are no longer relevant? Or otherwise, are actions taken in the cyberspace domain merely enablers for warring parties to achieve an advantage in industrial military capability?

Do useful theories exist to explain the collection of contemporary puzzles above, and are they traditional or do they fit the postmodernist paradigm? Traditional, or modern, warfare theory holds that war is an imposition of one state's political will upon another. Clausewitz stated it plainly, war is an act of force to compel an enemy to do your will.<sup>7</sup> Unfortunately, although Clausewitz' theory is eminently useful and persuasive to explain the conduct of warfare, it is of little use in trying to explain the dichotomy between American intervention in Libya versus the lack thereof in the case of

---

<sup>7</sup> Carl von Clausewitz, *On War* (Princeton: Princeton UP, 1984) 75.

Syria, where more than 60,000 people have died violently and nearly one million refugees have fled the violence in less than two years.<sup>8</sup>

However, some emerging theoretical constructs might prove more applicable to such puzzles. For instance, Buzan's securitization theory suggests that a national will does not exist, but that each conflict gets *securitized*—or bundled into a grouping in which the normal rules of politics do not apply—independently and for discursive purposes outside of the conflict itself. Buzan's securitization theory fits well within a postmodernist view of the world because it reifies the conversational, socially constructed, and relativistic aspects of reality.

Additionally, the nascent theory of neuroeconomics offers a plausible explanation for the Libya/Syria dichotomy. It describes the necessity of unpredictability among biological forms. If the United States is viewed as a living entity striving to survive, then some level of unpredictability confers a continuing advantage.

In his book on neuroeconomics, Paul Glimcher introduces a rational basis for necessary unpredictability. To set the stage for his argument, he challenges two traditional paradigms for viewing human behavior: Laplacian monism, and Cartesian dualism. Monism, a modern, scientific idea—ascendant following the Enlightenment—held that man's actions could be reduced and explained by a simple reflex mechanism at some irreducible level. Dualism, the concept that body and soul are two independent, distinct realities, was Descartes' explanation for unpredictability. At the heart of Descartes' proposed dualism is the idea that humans are comprised of two distinct realities: body and spirit; and actions can be either deterministic based upon reflexes or unpredictable results of the spirit.

---

<sup>8</sup> "Excuses for inaction," editorial, *Washington Post* 29 Jan. 2013: A14.

Glimcher expounds a different paradigm: Neuroeconomics.<sup>9</sup> Glimcher describes two distinct types of uncertainty in the behavior of living things: epistemological and evolutionarily necessary. Epistemological uncertainty stems from an actor's inability to see all the possibilities of its actions. When a state decides to go to war, for example, it does so with very limited foresight, as in the case of President Bush's invasions of Afghanistan and Iraq. Evolutionarily necessary unpredictability is a requisite component of competitive advantage in that an organism must be unpredictable to some extent to maximize its fitness. In accordance with this theory, the United States may have been deliberately unpredictable in assisting Libya but not Syria, purely for its own advantage.

Nearly four decades before Glimcher, Thomas Schelling contributed to this discourse about evolutionarily necessary uncertainty in his book *Arms and Influence*. Schelling offered a strategy for the nuclear era that he called the diplomacy of violence. The principles of this strategy were threefold: 1) the art of commitment, which included components of credibility and compellance; 2) the manipulation of risk; and 3) the dynamics of mutual alarm.<sup>10</sup> The manipulation of risk equates most closely to Glimcher's evolutionarily necessary uncertainty. Due to the fact that war results from a process, not a deliberate yes or no decision, uncertainty exists in its genesis and its outcome. Brinksmanship is the manipulation of the shared risk of war for a competitive advantage.<sup>11</sup> Thus, the continuing advantage of any entity depends upon the manipulation of uncertainty.

---

<sup>9</sup>Paul W. Glimcher, *Decisions, Uncertainty, and the Brain: the Science of Neuroeconomics*. (Cambridge: The MIT Press, 2003) 111.

<sup>10</sup> Thomas Schelling, *Arms and Influence* (Princeton: Yale UP, 1966) xii.

<sup>11</sup> Schelling, *Arms and Influence*, 99.

To some degree I could answer the question of whether warfare has taken on a postmodern form by keeping a score-card tally of the utility of older theories versus newer ones in explaining puzzles like the Libya/Syria dichotomy. Provided that I clearly characterize the old theories as modern and the new theories as postmodern, then one side “wins” and I declare warfare to be modern or postmodern based on these select cases. However, the case of neuroeconomics theory, for example, demonstrates that the novelty of a theory does not necessarily mean it is postmodernist. Glimcher’s theory does not fall squarely into either the traditional or the postmodern camp. It is unclear whether its reliance on Bayesian probability theory rather than some conception of the spirit makes it traditional, modern, and scientific, or postmodern. Additionally, Schelling contributed very similar ideas in the mid-1960’s, which obfuscates the status of those ideas as new or old, modern or postmodern.

Additionally, I add little or no clarity to the conversation about postmodern warfare if I conclude that new theories are more useful than old ones in some small set of cases. The reader would still be left to wonder what *characterizes* postmodern warfare. To answer this question requires a more comprehensive, historical approach that helps establish in the reader’s mind what postmodern warfare *is*.

Therefore, I will build up the concept of postmodern warfare from the most basic roots and frame the discourse in a very broad sense. The remainder of this chapter is divided into three main parts. The first section is on conflict, building from fundamental biological conflict to social conflict and warfare. The second section details the concept of security and introduces some emerging theoretical constructs to explain historical and contemporary security events. Finally, in the third section I depart from a theoretical

assessment to propose a hypothetical picture of postmodern warfare, which sets the stage for a more in-depth analysis of its constituent parts in subsequent chapters.

## **Conflict**

### ***Biological and Social Conflict***

All living forms engage in some degree of conflict. Plants compete for sunlight and nutrients, animals compete for food, and people likewise compete for limited resources. Some philosophers believe that this struggle to survive with a continuing advantage defines life itself. Nietzsche held that will to power is the ultimate fact of life, beyond even the will to existence or will to truth.<sup>12</sup>

Mankind, however, is endowed with the power of reason, which he can use to rise above individual interests. Even contemporary historians of war like John Keegan suggest that mankind can chart the course of human culture from a warlike past to a peaceful future.<sup>13</sup> If individuals reached some simple agreement as to what is in the universal interest of humanity then—the argument goes—mankind could leave conflict behind. Is such a utopia really possible?

In the *Federalist Papers*, James Madison argued no, stating succinctly, “The diversities in the faculties of men, from which the rights of property originate, are...an insuperable obstacle to uniformity of interests.”<sup>14</sup> In other words, mankind can never share a universal common interest because people are so different. For even if man overcame his differences of interest and agreed on a single uniting principle, such as

---

<sup>12</sup> Friedrich Nietzsche, *Thus Spake Zarathustra* (New York: The Modern Library, 1999) 125.

<sup>13</sup> John Keegan, *A History of Warfare* (New York: Vintage Books, 1993) 60.

<sup>14</sup> Niebuhr, *Moral Man and Immoral Society: A Study in Ethics and Politics* (New York: Charles Scribner's Sons, 1932) 225.

equal justice, and constructed a system to administer it, individuals—with their own unique interests—would strive to define or control the levers of power within such a system.

Even with the gift of reason, conflict among individual biological forms is eternal. As Niebuhr said, “reason is always, to some degree, the servant of interest in a social situation, social injustice cannot be resolved by moral and rational suasion alone...Conflict is inevitable, and in this conflict power must be challenged by power.”<sup>15</sup>

Furthermore, some living entities like ants and humans cohere into social groups, and conflict within these groups is also inevitable and eternal. Renowned social biologist E.O. Wilson argues that people are hard-wired to join groups, and then after they join a group they consider it superior to other groups and ultimately compete with those other groups for dominance.<sup>16</sup> The ancient Indian statecraft manual *Arthashastra* described the necessary enmity between neighbors. Neighbors are natural enemies, and your enemies’ enemies are your natural friends.<sup>17</sup> A rational view of warfare must admit to the power of interests and the inevitability of conflict. A postmodern interpretation of war does not stray from this view.

Admittedly, my contention that conflict is eternal demands a rigorous appraisal. Thankfully, I can rely upon a body of work centuries in the making. Numerous philosophers have devoted critical thought to the subject of conflict, reason, and the social contract.

---

<sup>15</sup> Niebuhr, *Moral Man and Immoral Society*, xiv.

<sup>16</sup> Edward O. Wilson, *The Social Conquest of Earth* (New York: W.W. Norton and Company, 2012) 1.

<sup>17</sup> John A. Lynn, *Battle: A History of Combat and Culture* (Cambridge, MA: Westview Press, 2003) 30.

### ***The Social Contract***

An early, hopeful postmodernist in the second sense (post-national), Immanuel Kant described in *Eternal Peace* how man could rise above the perils of warfare. “Just as lawlessness and caprice among individuals involve sufficient evils to compel the establishment of the state, so too must the evils of war compel the establishment of a federation of states to enter into a Universal constitution.”<sup>18</sup> To the realist who might point to the timeless history of conflict, he counters with the rejoinder that men must implement that which ought to be. Kant believed that the “New England of America” (the United States) had acted out his philosophical principals in their revolution. Kant’s ideas were, and are, powerful and compelling. Edwin Mead’s introduction to *Eternal Peace* extolled the virtues of Kant’s vision, and suggested the inevitability of such a rational course to end war. Ironically, Mead penned his paean to Kant in 1914, just prior to the ill-named “war to end all wars.”

Immanuel Kant built his philosophy on a set of basic propositions. In *The Principles of the Political Right* he described that the civil state is founded upon the following rational principles: 1. The Liberty of every member of the society as a man; 2. The equality of every member of the society with every other, as a subject; 3. The self-dependency of every member of the commonwealth, as a citizen. In *The Principle of Progress* he expounded that eternal peace was achievable through agreements on rules like abolishing standing armies, outlawing intimidation of other states, and a mandate that every state shall be a Republic. His bedrock principle was that mankind was endowed with reason to know right from wrong, and therefore must implement it: “There can be no

---

<sup>18</sup> Immanuel Kant, *Eternal Peace and Other International Essays*, trans. W. Hastie (Boston: The World Peace Foundation, 1914) 100.

conflict between political philosophy as the practical science of right, and moral philosophy as the theoretical science of right.”<sup>19</sup> If morals exist, man must follow them.

Kant seems to miss the fundamental ordering principle within lawful states—those bastions of rational order that lift men out of their natural state of conflict—the threat of force. Most people follow laws because the legitimate threat of force compels them to do so. Furthermore, in a state—as in any structure in which power is available—interest groups vie to control the reins of that power endowed with the legitimacy of force. Kant was not blind to the idea that competition would arise for power, and in *The Principle of Political Order* he acclaimed the division of power among different branches of government. Nonetheless, he did not propose any practical, structured division of power to unite a world arrayed in anarchy. Rather, he suggested that countries should simply agree on a rule-set to end warfare without pointing to what enforcement mechanism would compel such order when conflict arose.

Williams provides a more general version of the above argument. He states that all rule-bound orders (such as legal systems) depend ultimately upon a capacity for decision that itself stands outside of the given structure of rules. In his criticisms of legal positivism, for example, he argues that the application of any rule requires the existence of a prior rule that determines which particular rules are to apply to which particular instance. This rule structure is inherently indeterminate: no rule can cover definitively all of the different instances to which different rules might apply. At some level, there must simply be a decision (a judgment) on this matter. To say that this decision must itself be governed by rules is only to defer the problem, for even if it were itself determined by a prior set of rules, these rules themselves would require adjudication and decision. If the

---

<sup>19</sup> Kant, *Eternal Peace*, 103.

process were not to go on infinitely, a position of final decision, itself undetermined by rules, must exist.<sup>20</sup>

Many religions offer a practical solution to this infinite problem: to declare a particular set of rules the final judgment, complete with a threat of force to uphold the rules. In Christianity, for example, the Bible is considered the Word of God. To compel the behaviors prescribed in the Bible, a threat of force exists as part of that rule set. It is the threat of eternal force: an automatic, indisputable sanction for disobedience. Nonetheless, disputes arise about this rule-set. Despite a shared Christian belief that the Bible is the authoritative source on rule-bound human order, thousands of years of human history are written by clashes between powerful groups laying claim to the “true” interpretation of the words contained in its text. Ultimately, some powerful human group makes the judgment about how to interpret the Bible, and how to apply its rules.

Morris Janowitz recognized the necessity of a threat of force in creating order amid conflict. In his dissertation on social control he described that a system of authority must be based on irreducible elements of coercion.<sup>21</sup> Although Janowitz thought of coercion as nearly the opposite of social control, he wrote that the threat and use of force have been essential for achieving more effective social control throughout history. Although, unlike Kant, he recognized the necessity of force he drove in a direction similar to Kant’s philosophy:

The concept of social control follows the intellectual lead of Auguste Comte, and derives from a rejection of economic self interest theories. It rests on a value commitment to at least two elements: the reduction of

---

<sup>20</sup> Michael Williams, “Words, Images, Enemies: Securitization and International Politics”, *International Studies Quarterly* Vol 47 (2003): 517.

<sup>21</sup> Morris Janowitz, *On Social Organization and Social Control*. (Chicago: The U of Chicago P, 1991) 74.

coercion, and the elimination of human misery—although it recognizes the persistence of some level of inequality.<sup>22</sup>

Philosopher Reinhold Niebuhr also recognized the shortcomings of Kant's argument. In his mind it was the flawed central article of faith in the Enlightenment that reason will lead to utopia among men. Condorcet, for instance, was a prime apostle of the Enlightenment: in his view "universal education and the development of the printing press would inevitably result in an ideal society."<sup>23</sup> After the accumulation of hundreds of years of evidence against Condorcet's theory, Niebuhr proposed that man is driven by reason and passion and therefore intelligence can never eliminate conflict.

Niebuhr went on to describe the shortcomings of the "obvious rational check upon the use of coercion."<sup>24</sup> The obvious rational check would be to submit control of the instruments of coercion to some impartial tribunal that can handle disputes without prejudice. The shortcoming, of course, is that the machinery of such a theoretical tribunal is never truly impartial, nor entirely under the control of the whole community. It is always under the control or influence of some class or group who can use it to its own advantage. This is the same shortcoming of any hypothetical postmodern international structure, the one Kant missed.

In the United States, we recognize the social contract today in the form of government: local, state, and federal. The emergence of the Tea Party brand of Republican politics provides evidence that the purpose of government is a subject of contentious debate. Is the purpose of government that which Kant proposed? That is, to mitigate the lawlessness and caprice of the individual. Is government established, as

---

<sup>22</sup> Janowitz, *On Social Organization and Social Control*, 82.

<sup>23</sup> Niebuhr, *Moral Man and Immoral Society*, 24.

<sup>24</sup> Niebuhr, *Moral Man and Immoral Society*, 238.

Janowitz suggested, to reduce the prominence of coercion and human misery? Or does government exist to promote equality of justice, Niebuhr's prime value? Thomas Paine framed a minimalist form of government by writing, "every man wishes to pursue his occupation and enjoy the fruits of his labors and the produce of his property in peace and safety and with the least possible expense. When these things are accomplished all objects for which governments ought to be established are accomplished."<sup>25</sup>

Interestingly, Paine's small government prescription is likely to resonate with Tea Party supporters. Paradoxically, the Tea Party is a strong defender of national defense spending, which pays for much more than the peace and security of its citizens. For example, the United States military sustains an immense welfare state for its members, including medical care for life, housing according to need, job security, and generous pensions. Furthermore, defense spending in the United States creates millions of jobs that Paine never fathomed, thus creating a circular logic in Paine's formulation. Namely, government *creates* the occupations that Paine said man must enjoy in peace and safety with the least possible expense. The "fruits of his labors and the produce of his property" include aircraft carriers, joint strike fighters, and weaponry, to name very few. Is one purpose of government to create and sustain a market for man's labor? Of course, Paine would most assuredly reject such a proposal, but he envisioned his model government long before the advent of a twentieth century technocracy, back when America was an agrarian nation.

In general, it takes massive social revolutions to alter the form of the social contract that provides security for its members. The Industrial Revolution forced America away from its agrarian roots, and transformed a nation from one that was deeply

---

<sup>25</sup> Reinhold Niebuhr, *The Irony of American History*. (Chicago: The University of Chicago Press, 1952) 30.

suspicious of a standing army to a nation that accounts for half of the world's military spending.<sup>26</sup> Perhaps an information revolution, which many people see as ongoing, will allow for societal change and a fundamental shift in the social contract. The result might be a postmodern form in which the discursive elements that define the role of government change from states to something else, and the objects governments secure shift from territorial security to something different.

The promotion of happiness, for example, has gained increasing attention as a potentially legitimate role of government. Niebuhr defined happiness as “the inner concomitant of neat harmonies of body, spirit, and society.”<sup>27</sup> Even with such a precise definition, happiness is a difficult item to measure. Nonetheless, a Brazilian panel recently passed an amendment to their constitution that made the pursuit of happiness a right.<sup>28</sup> Brazil seeks to promote happiness through access to services on five fronts: increasing popular awareness, mobilizing social groups, stimulating participation in social projects, training “multipliers” and motivating citizens to contribute to its projects. Brazil is not alone in this discussion about the proper role of government. The government of Bhutan maintains a gross national happiness index similar to the more common gross national product (GNP). Such developments serve as examples of the changing conversation that will define the future role and structure of government.

The purpose and structure of government is subject to the discursive elements of debate, which can potentially create change. Through discourse, people will define the purpose and the referent objects (states, coalitions, unions, etc.) that form the skeleton of

---

<sup>26</sup> “Military Expenditure (% of GDP)” *The World Bank*, online, internet, 9 Jan. 2013. Available: <http://data.worldbank.org/indicator/MS.MIL.XPND.GD.ZS>

<sup>27</sup> Niebuhr, *The Irony of American History*, 61.

<sup>28</sup> Jonathan Wheatley, “Brazilian panel passes amendment to make pursuit of happiness a right,” *Washington Post* 12 Nov. 2011: A9.

governance among men. Nonetheless, two key aspects will remain constant throughout all of human history: the inevitability of *conflict*, and the necessity of some element of *force* as the ultimate arbiter of any rule-set designed to mitigate such conflict.

A postmodern social contract in the second sense (postnational) is possible under the acknowledgement that conflict and force will persist. It would leave behind the modern era of conflict among states arrayed in anarchy by trading in sovereign freedom for greater collective human security. The social contract through which man exchanges some of his personal freedom to increase his collective security works within lawful states, and can be expanded in the postmodern era. Conflict will remain, but if each state handed over its instruments of coercion to some international system of social control then coercion and misery could be reduced. Some states already agree to arrangements of this sort, such as members of the European Union. However, such an agreement from America would require a sea-change of sentiment. Groups that have accumulated vast power are usually unwilling to relinquish it.

Nonetheless, such a revolution is possible, but would require dedication to a set of principles so compelling as to overcome the passion mankind has for his current arrangement: the nation-state. This current establishment is supported by symbols such as flags, anthems, traditions, and languages. Few ordering principles arouse loyalty and commitment like nation-states. For example, people often compromise their most avowed principles so that they can defend their state through modern warfare. For instance, men and women who believe “thou shalt not kill” to be a commandment from God regularly set aside that belief in order to kill for the state.

Human loyalty to the state is constantly reinforced in the modern era. The Olympic Games provide an exemplary case study of such reinforcement. At the opening ceremonies, athletes parade through the stadium grouped by state. Upon completion of a successful event, supporters offer the national flag to the athlete, who often drapes herself in the symbol and celebrates a remarkable feat not as a human, but as an American or a Canadian or a Jamaican. As the victor's national anthem rings out at the medal presentation, the pageant ceremoniously recognizes the preeminence of the state and the sanctity of the anarchic global political structure.

In fact, the International Olympic Committee only very rarely allows athletes to compete in the games without the official sanction of a state. Guor Marial is one of the very few independent athletes to ever compete at the Olympic Games. The marathoner's unique experience shows just how unusual circumstances must be to allow an exception to the International Olympic Committee's adherence to the state system. Marial fled civil war in the state of Sudan before the side with which he identified—South Sudan—declared independence and gained international recognition. Associated Press writer Gerald Imray captured Marial's experience:

Marial was born in what is now the newly independent country of South Sudan. He fled the violence and hardship way before the south broke away from Sudan last year and doesn't have any South Sudanese documents. Although he is now a permanent resident in the US, he's not a citizen there, either. Sudan offered him the chance to represent it at the games. He thanked them but explained he had no desire to run for that country following the civil war and the hardships dealt out to him and his fellow South Sudanese. "When I left Sudan, there was [sic] a lot of issues that happened to me, happened to the South Sudanese. It was hard for me to accept the offer (of Sudan)," he said. So, without an official nationality, he was able to become one of four athletes competing in London under the Olympic flag. The others are from the former Netherlands Antilles.<sup>29</sup>

---

<sup>29</sup>Gerald Imray, "Marathoner is running under the Olympic flag" *Washington Post* 10 Aug. 2012: A14.

With very few exceptions, the framework, symbols, and ceremonies of the Olympic Games cement loyalty to a state-centric, internationally anarchic political structure in younger generations. It is the same loyalty that Napoleon so expertly exploited in the eighteenth century to create a true revolution in military affairs, taking warfare from fiefdoms and placing it in the hands of nations.

The above section highlighted the timeless elements of human society: conflict and force. Any postmodern social contract must necessarily maintain them. It also underlined an assumption about conflict and force in the modern era: the centrality of the state to the social contract. The face of postmodern warfare—the exercise of force to enforce a social contract—need not mirror modern warfare.

### ***War and Politics***

Like the study of the social contract, the study of war and politics bears a rich history. Janowitz described the distinctive aspects of war as a process for social change. He defined it narrowly as follows: it is waged only by nation states; it relies on a highly professionalized and specialized occupation; and the transition from war to peace has a different calculus from its inverse. Namely, social inertia and the postponement of decisions may contribute to the nonviolent resolution of conflict other than war, but in war prolongation of peace decreases existing advantages.<sup>30</sup>

His distinctive aspects are flawed. Janowitz's first distinctive aspect, war is waged only by nation states, does not comport with historical or contemporary evidence. For example, the existence of civil wars suggests that rebel groups or different factions within a nation state can engage in war. His second flawed aspect, war's reliance on a

---

<sup>30</sup> Morris Janowitz, *On Social Organization and Social Control*, 99.

highly professionalized and specialized occupation, draws on the twentieth century western experience, but does not account for rebel groups either. Finally, his observation on the calculus of decisions in warfare is merely a subset of a broader theory of behavior. That is, living things strive to survive with a continuing advantage. If it is advantageous to act, they will do so. On the other hand, if it is to their advantage to delay action, they will delay.

Long before Janowitz tried to define the distinctive aspects of war as a process for social change, Carl von Clausewitz sought to create a general theory on warfare. He proceeded in the dialectical style of his contemporary, Hegel. Clausewitz began with the simple proposition that war is an act of force to compel an enemy to do your will.<sup>31</sup> From there, he proceeded to the thesis that war will always escalate to extremes in which each party exerts the maximum amount of force of which it is capable. This ideal form of war would be true, he continued, if—and only if—war was an isolated, decisive, and final act. War is not isolated, decisive, or final in the affairs of men, however, so it must be judged by probabilities. Clausewitz observed that the political object of a war helps determine the probabilities of the level of force employed. Therefore, he concludes, war is policy by violent means.<sup>32</sup>

Clausewitz's dialectic style has led to gross misinterpretations over centuries. For example, eminent historian John Keegan misread Clausewitz thesis of "total war" as the ultimate end of politics.<sup>33</sup> Keegan misread Clausewitz's prose to propose a theory of what war ought to be. Keegan seems to have completely missed the nature of politics as the limiting factor in war that led Clausewitz to conclude that war is the continuation of

---

<sup>31</sup> Clausewitz, *On War*, 75.

<sup>32</sup> Clausewitz, *On War*, 87.

<sup>33</sup> Keegan, *History of Warfare*, 3.

politics by other means. On the contrary, Keegan says war is not politics but rather a tribal ritual. Keegan even read into Clausewitz's theory that "continuation of politics by other means" requires that politics to be carried out by states.<sup>34</sup> Despite his potentially misleading style, Clausewitz convinced many serious-minded theorists that war is politics by other means. To define politics, however, was outside the scope of his book. Nonetheless, if warfare is a political act, the question remains: what is politics?

Buzan sketched three dimensions of debate on the meaning of politics. He attributed the first dimension primarily to Arendt and Easton, who (respectively) viewed politics as an expressive act in which individuals strive for immortality or a functional act in which a sector of society performs specific tasks in service to the whole. I consider this first dimension to be the purpose dimension. A postmodernist view—in the first sense (discourse drives reality)—of the purpose of politics need not select between the two sides of the debate. Instead, it can define politics as an expressive act that results in a functional division. As an expressive act, politics is a form of identity creation and destruction.

The second dimension of the meaning of politics Buzan attributed to Schmitt and Habermas. In my view, the second dimension is the grouping dimension. Schmitt focused on groupings founded on the friend/enemy divide, whereas Habermas primarily described groupings based on community and consensus building. Again, a postmodernist viewpoint does not rest squarely on any particular point along this continuum. Instead, politics can variably be driven by discourse that revolves around friend and enemy groupings or community and consensus divides. In this dimension,

---

<sup>34</sup> Keegan, *History of Warfare*, 12.

politics is a grouping discourse designed to highlight or downplay various associations for a particular purpose.

Buzan's third dimension of politics rests on a spectrum from Weber to Laclau. Weber viewed politics as the institutionalization of rule, whereas Laclau understood it as the stabilization of authority. The distinction here is not particularly clear, and Buzan adds no clarity when he conflates the two and defines politics as the relatively stable institutionalization of authority.<sup>35</sup> I assess this dimension as the decision, or rule-setting, dimension.

The decision dimension of politics is the key dimension from a postmodern conflict point of view. As discussed above, conflict is inevitable. Even if a clear, mutually agreeable rule-set were devised, people will struggle to control or influence the decision dimension of politics. Buzan and Waever described this process as securitization. In accordance with their ideas, warfare is a tipping point where the normal rules no longer apply, and groups engage in armed conflict to define the new rule set. As such, politics is discourse aimed to securitize issues for the purpose of influencing the rule-set. Warfare is the continuation of this discourse through violent means.

In summary, *war is violent politics, and politics is the discourse of identity, grouping, and securitization.*

It is very difficult to precisely categorize actions and events as acts of war, or to define a particular period as wartime. Such attempts at these definitions have changed over time. During the Civil War, the US Supreme Court defined war as "that state in

---

<sup>35</sup> Barry Buzan, Ole Waever, and Jaap de Wilde, *Security: A New Framework for Analysis* (Boulder, CO: Lynne Rienner Publishers, 1998) 142.

which a nation prosecutes its right by force.”<sup>36</sup> Contemporary definitions tend to drop the state as a necessary component of war. For example, the *Oxford Companion to American Military History* defines war as “organized violent activity, waged not by individuals but by [people] in groups.”<sup>37</sup>

Culture also shares an important relationship with politics and war. Zakaria describes culture as the “shared experience of people that is reflected in institutions and practices.”<sup>38</sup> He notes that culture can change, as evidenced by the difference between a Europe that was once a hotbed of violent nationalism, but is now “postmodern and almost pacifist.”<sup>39</sup> Likewise, according to a quote attributed to the late Daniel Patrick Moynihan, “Culture, not politics, determines the success of a society...[but] politics can change culture and save it from itself.”<sup>40</sup>

Cultural norms help frame a society’s definition of warfare. In the United States, World War II serves as an example of what war is “supposed” to be. For example, American recollection of World War II as a good war “reinforces the idea that real wars were large-scale conflicts with other powerful nations, punctuated by peacetimes.”<sup>41</sup> Military analyst Jeffrey Record argues that this conception of the “American way of war” focuses training on outdated modes of armed conflict, and thus undermines the US military’s strategic effectiveness.<sup>42</sup> Thus, to attach the term war to any event or series of

---

<sup>36</sup> Mary Dudziak, *War Time* (New York: Oxford UP, 2012) 27.

<sup>37</sup> Dudziak, *War Time*, 27.

<sup>38</sup> Fareed Zakaria, “Cultural development,” *Washington Post* 2 Aug. 2012: A21.

<sup>39</sup> Zakaria, “Cultural development,” A21.

<sup>40</sup> Zakaria, “Cultural development,” A21.

<sup>41</sup> Dudziak, *War Time*, 62.

<sup>42</sup> Dudziak, *War Time*, 62.

events is merely an argument, not necessarily a discernible feature of the physical world.<sup>43</sup>

Security itself is a special subset of politics. War does not necessarily have to be invoked, but security discourse involves elements related to force and conflict. These force elements can range from general domestic welfare—if equated with wealth, power, and prestige—to an actual decision to invade a sovereign state. Although dramatic events like Pearl Harbor certainly affect public perception of security, “it is primarily structured by the ebb and flow of partisan and group-based political conflict.”<sup>44</sup> In the next section I take a closer look at the concept of security, first from a historical perspective and then through the lens of some novel theories that help explain the politics of conflict from a postmodern viewpoint.

## **Security**

### ***Background***

The concept of security in the United States has undergone a transformation over the course of history. It began as a description of physical protection and evolved to describe nearly everything the state does.

Prior to the Declaration of Independence, American colonists considered their physical and territorial integrity the objects of security. They were loyal to their families and neighbors, and formed colonial militias to secure themselves from external threats. For example, in King Phillip’s War (1675) soldiers from Plymouth, Massachusetts, and

---

<sup>43</sup> Dudziak, *War Time*, 136.

<sup>44</sup> Dudziak, *War Time*, 83.

Connecticut aligned with Indian allies to defeat the Narragansetts.<sup>45</sup> This alliance was *ad hoc* and temporary, and the fighting men professed greater loyalty to their contracts than to a state, not to mention a permanent union of states.<sup>46</sup>

State militias allied during the Revolutionary War to combat an enemy with far greater military capability, and then Americans eschewed a proposed Federal model of government, preferring these militias as their trusted guarantors of security. James Madison had to argue fervently that “security against foreign danger is one of the primitive objects of civil society. It is an avowed and essential object of the American Union. The powers requisite for attaining it must be effectually confided to the federal councils.”<sup>47</sup> Ultimately, Madison’s—and his colleagues—argument for federation won, and laid the groundwork for future expansion of military functions.

Nonetheless, even during the Civil War senior leaders advocated a restricted use of the military apparatus. General McClellan advised President Lincoln that the whole policy of the government ought to be to secure the union, not to advocate any ideological principles such as the abolition of slavery.<sup>48</sup> If the abolition of slavery hurt the cause of a secure union, it ought not be pursued. The military, in McClellan’s opinion, was still a machine that fought for physical and territorial security, and no more.

Despite Americans’ preference for state militias over a federal army, the size and role of the military was bound to change with new organizational structures. With the rise of the professional staff, staff organizations noted that “no matter how often

---

<sup>45</sup>Allan R. Millett, Peter Maslowski, *For the Common Defense: A Military History of the United States of America* (New York: The Free Press, 1994) 16.

<sup>46</sup> Millett, *For the Common Defense*, 9.

<sup>47</sup> Millett, *For the Common Defense*, 651.

<sup>48</sup> Russell Weigley, *The American Way of War: A History of United States Military Strategy and Policy*. (New York: Macmillan Publishing Company, Inc., 1973) 134.

politicians glorified citizen-soldiers or how severely Congress cut the Army, regulars would provide the first line of land defense.”<sup>49</sup>

The size and role of the military also changed with new voices in the conversation and new technologies involved. In the nineteenth century, when Americans trusted the Navy to provide the first line of defense, Mahan voiced the opinion that the purpose of the military was more than just to ensure physical security; the military could be used to make a nation great.<sup>50</sup>

Historian Russ Weigley asserts that victory in WWII and America’s rise to superpower status gave the United States responsibilities that required the permanent employment of armed forces to serve national policies.<sup>51</sup> Furthermore, the use of military force to deter war was a revolutionary change after WWII, and deterrence of a nuclear holocaust was a compelling military endeavor. Schelling’s treatise on the diplomacy of violence asserted that, up until World War II, coercive violence was only decisive after a military victory was achieved, but that the advent of nuclear weapons had brought about the possibility of extreme violence before victory, and deterrence without violence.<sup>52</sup> Such statecraft required a large and permanent military structure.

Nonetheless, true to its heritage, the public still called for massive demobilization after the war.<sup>53</sup> During the Cold War, however, American society began to fear a standing army less than the threat of a nuclear holocaust, and to find more uses for its

---

<sup>49</sup> Millett, *For the Common Defense*, 133.

<sup>50</sup> A.T. Mahan, *The Influence of Sea Power Upon History, 1660-1783* (New York: Dover Publications, Inc., 1987) 1.

<sup>51</sup> Weigley, *American Way of War*, 366.

<sup>52</sup> Schelling, *Arms and Influence*, 16.

<sup>53</sup> Weigley, *American Way of War*, 368.

military. In 1948 the State Department contended that the primary purpose of the armed forces was not to fight wars, but rather to provide support for stated political positions.<sup>54</sup>

After the Cold War, as war and danger became more distant, Vlahos argues the United States was obligated to defend the *status quo* international system everywhere, with limited resources. To defend everywhere, the purpose of government must become to maximize revenue for the state. To maximize revenue, the state must grow the administrative and regulatory bureaucracy. Then, it has to reify and militarize the state for the nominal purpose of security. In order to sustain this model, the state must sustain the flow of global rewards and favors that its people expect.<sup>55</sup>

The growth in the size and role of the US military stems in part from these favors that become practical, local political matters. Millett notes that some defense spending in the twentieth century had benefits beyond strictly military security, such as interstate highways, improved public education, and technological research and development.<sup>56</sup> In a democracy, people answer simple questions like “am I better off now than I was four years ago?” when they cast their ballots. Their answer to these questions is determined by the state of things like highways, education, and technology. Likewise, elected representatives use the language of security to justify spending on these practical, local matters.

Today, unlike at the birth of the United States, the role of the military often extends far beyond fighting wars. The writer James Fallows, a Rhodes Scholar and former speechwriter for President Carter, describes how societal progress comes from the

---

<sup>54</sup> Weigley, *American Way of War*, 379.

<sup>55</sup> Michael Vlahos, *Fighting Identity: Sacred War and World Change* (Westport, CT: Praeger Security International, 2009) 150.

<sup>56</sup> Millett, *For the Common Defense*, 534.

military spending money on it under the guise of national defense. “National Defense can make us do things—train engineers, build highways—that the long-term good of the nation or common sense cannot.”<sup>57</sup> Today, Williams argues that security has become the rationale for everything the state does.<sup>58</sup> United States Senator Tom Coburn(R-OK) might concur. He wrote a report titled “The Department of Everything” in which he argued he could save \$69 Billion over ten years by cutting programs “where the Pentagon works that have nothing to do with defense.”<sup>59</sup> He cites as an example the fact that the Department of Defense runs 64 elementary and secondary schools at 16 military locations where 2000 teachers teach 19,000 students.<sup>60</sup> Applying Williams’ “everything” argument more broadly and philosophically, Niebuhr states “power, once attained, places the individual or group in a position of perilous eminence so that security is possible only through the extension of power.”<sup>61</sup> The concept of security in the United States grew with increasing American power to the point that “security” today is at risk any time the state is not extending its power.

Clearly, a conception of security as everything the state does is not particularly useful for the organizations entrusted to protect it. In the next section I identify a few alternative frames of reference for the concept of security. These lenses are novel and can help define the concept of security for a postmodern era.

---

<sup>57</sup> James Fallows, “Military Efficiency” *The Atlantic*, Aug. 1991: 30-34.

<sup>58</sup> Michael Williams, “Words, Images, Enemies,” 517.

<sup>59</sup> Walter Pincus, “Republican senator’s plan trims fat at the Pentagon” *Washington Post* 20 Nov. 2012: A15.

<sup>60</sup> Pincus, “Republican senator’s plan trims fat at the Pentagon,” A15.

<sup>61</sup> Niebuhr, *The Irony of American History*, 42.

## *Security as Identity*

The Cold War was a time of change for American national identity. After WWII, policy makers had to determine how to prepare for the permanent conflict apparent in the struggle with the Soviet Union, yet maintain the constitutional principles and democratic traditions.<sup>62</sup> This central challenge—how to maintain a liberal democracy amidst a garrison state—led Huntington to write his landmark book on civil-military relations. As the Cold War matured, “national security concerns became the common currency of most policy makers, the arbiter of most values, the key to America’s new identity.”<sup>63</sup>

Robert Kagan wrote of the controversial identity espoused in recent American foreign policy:

[George H.W. Bush and Bill Clinton] cast the United States as leader of a “new world order,” the “indispensable nation.” As early as 1992, Robert W. Tucker and David C. Hendrickson assailed President Bush for launching the first Persian Gulf war in response to Saddam Hussein’s invasion and occupation of Kuwait. They charged him with pursuing “a new world role required neither by security need nor by traditional conceptions of the nation’s purpose,” a role that gave “military force” an “excessive and disproportionate position in our statecraft.”

Tucker and Hendrickson were frank enough to acknowledge that, pace Paul Kennedy, the “peril” was not actually “to the nation’s purse” or even to “our interests” but to the nation’s “soul.” This has always been the core critique of expansive American foreign policy doctrines, from the time of the Founders to the present—not that a policy of extensive global involvement is necessarily impractical but that it is immoral and contrary to the nation’s true ideals.<sup>64</sup>

Kagan makes it clear that some critics think the nation’s “soul” or its “true ideals” should be expressed coherently as a part of US foreign policy. In their view, to express the true

---

<sup>62</sup> Dudziak, *War Time*, 70.

<sup>63</sup> Dudziak, *War Time*, 71.

<sup>64</sup> Robert Kagan, “The Price of Power,” *The Weekly Standard* 24 Jan. 2011: 27.

American identity correctly is an intrinsic value to be pursued even at the expense of practical concerns such as territorial security.

The soul of the nation is not a new idea. Niebuhr considered it a paradox that every nation refuses to go to war unless a national interest is at stake, but then remains at war because something much greater than a national interest is at stake.<sup>65</sup> This “something much greater,” is the identity or soul of the nation.

Michael Vlahos argued in *Fighting Identity* that war is an expression of identity. He focused not on individual identity, but what he called big identity—who we are: a nation, a religion, a collective.<sup>66</sup> His argument follows that today humans are living in a time of globalization, which historically is a time of major identity change (from Romans to Christians, for example). So, as the United States fights global war against emerging identities such as al-Qaeda, it legitimizes their acts and grants them a truly global identity. C.H. Gray also shares Vlahos’ opinion as he agrees that war is a spectacle, a ritual, a cultural event.<sup>67</sup> Naval War College Professor of Strategy Peter Dombrowski concurs and adds that war is socially constructed.<sup>68</sup>

Like the decision to invade or remain at war, security is not necessarily a practical concern separate from identity. Williams argues that the meaning of security is not determined by the topic itself but by people’s feelings about the topic.<sup>69</sup> People’s feelings are often deeply entwined with identity, and nationality is one of the foremost identities that people assume.

---

<sup>65</sup> Niebuhr, *The Irony of American History*, 36.

<sup>66</sup> Vlahos, *Fighting Identity*, 3.

<sup>67</sup> Gray, *Postmodern War*, 44.

<sup>68</sup> Metz and Cuccia, “Defining War for the 21st Century,” 11.

<sup>69</sup> Michael Williams, “Words, Images, Enemies,” 516.

Barry Buzan notes that the concept of security, when it is considered thoughtfully as a practical concern, can be tied to threats against two pillars of political stability: internal and external.<sup>70</sup> First and foremost for the survival of any system is the internal pillar of political stability: legitimacy. Every surviving system of governance strives to attain and maintain legitimacy. Its survival depends upon the counteraction of threats to this internal pillar of stability. Buzan highlights four artifacts of legitimization: ceremony, ritual, contract, and symbolism.<sup>71</sup> Power underwrites the legitimacy of any governmental structure. In the United States, for example, the people distribute governmental power to three separate branches of federal government in addition to multiple other layers of government (state, county, and municipal), recognizing that unchecked, unbalanced power can become oppressive and impose legitimacy through the application of force against the people.

The second pillar of political stability is the external pillar: recognition. Identity is most visible in this form. Political entities strive to gain recognition along with legitimacy. The contemporary conflict in Syria serves as an excellent example of the importance of recognition to political stability. On August 27<sup>th</sup>, 2012, the French government pleaded with the United States government to recognize the Syrian rebels as the legitimate state authority. The fact that a *state* was pleading with another *state* to grant recognition to a rebel group as the legitimate authority of another *state* underscores the validity of the modern, state-centered global political structure as well as some of the inherent flaws. Sovereignty is defined by the recognized system.

---

<sup>70</sup> Buzan, *Security*, 145.

<sup>71</sup> Buzan, *Security*, 91.

Some authors do not even recognize their own underlying reverence for the state. For example, Kenichi Ohmae's four external symbols of sovereignty—distinct national currency, separate national bank, distinct defense capability, and an effective constitution and legal system—are analogous to Buzan's artifacts of legitimization. These symbols, or artifacts of recognition, are clear indicators of the importance of the nation-state in the current global political structure. The state has such a central role in defining discrete identities that Ohmae cannot even define symbols of sovereignty without referring to *national* currency and a *national* bank. The central argument of his book revolved around the proposition that the global stage is changing, and he recognized some of the post-national forms that have emerged in the last century. For example, he argues that in the European Union—a type of post-state political arrangement—the Euro and the European Central Bank replace a national currency and a national bank, and that the North Atlantic Treaty Organization (NATO) provides a distinct defense capability.<sup>72</sup> However, Ohmae fails to acknowledge that NATO—as an independent entity—has insufficient military capability to underwrite its own sovereignty. Furthermore, he declines to even discuss the (in)effectiveness of the European Union's legal or constitutional structure. His exclusion of such a discussion highlights just how tenuous postmodern political forms are today.

Regardless of the distinction between modern and postmodern political structures, many theorists and practitioners agree: war has other psychological and social purposes besides the protection of national interests.<sup>73</sup> Among these purposes is the expression of an identity.

---

<sup>72</sup> Kenichi Ohmae, *The Next Global Stage* (New Jersey: Wharton School Publishing, 2005) 118.

<sup>73</sup> Metz and Cuccia, "Defining War for the 21st Century," 5.

In order to move from a modern identity to a postmodern identity, the frame of reference must shift from the state to something else. In terms of security, such a shift is theoretically possible. Williams recognized that “the ‘logic’ of security can be broadened and pried loose from too narrow a state-centrism and applied to other referent objects without losing its conceptual specificity.”<sup>74</sup>

Returning to Vlahos’ argument, periods of globalization are typically the time during which the referent objects of security—those entities seeking legitimacy and recognition—change. Specifically, Vlahos points to Greco-Roman late antiquity and the high middle ages as periods of globalization. These were times of cultural creative destruction.<sup>75</sup> From these periods he culls various case studies of emerging identities: the Muslim brotherhood (a transnational identity), gangs, Hizbullah, al Qaeda, the Pakistani army, and professional security subcultures (such as the CIA or US Marine Corps).<sup>76</sup> Viewed on the macro scale, Vlahos presents a play-by-play analysis of changing identities over history: from clan to tribe to religion to nation.<sup>77</sup> He leaves the reader to ponder what is coming next, with a less-than-subtle pretext that in 229 AD the historian Cassius did not even mention Christians in his history of civilization.<sup>78</sup> Vlahos cautions that, similarly to Roman nonchalance eighteen hundred years ago, our attitude toward non-state actors portends a threat to the current system.

Indeed, seeds of change have been scattered about the globe, each of which can potentially alter the central referent object of political discourse. For example, supra-states like the European Union, the North American Free Trade Agreement, and the

---

<sup>74</sup> Williams, “Words, Images, Enemies,” 511.

<sup>75</sup> Vlahos, *Fighting Identity*, 3.

<sup>76</sup> Vlahos, *Fighting Identity*, 18.

<sup>77</sup> Vlahos, *Fighting Identity*, 40.

<sup>78</sup> Vlahos, *Fighting Identity*, 84.

United Nations offer political organizational models different from the nation-state. Chapter three covers the nature of post-nationalism in greater detail.

### ***Security as a Speech Act: Securitization***

Another way to view security, besides as an expression of identity, is as a socially constructed outcome of discourse. This concept, known as securitization, was proposed most thoroughly by Buzan and Waever. It is part of the Copenhagen School of thought on security. Chris Williams summarized the idea neatly in the *International Studies Quarterly*: “In securitization theory, “security” is treated not as an objective condition but as the outcome of a specific social process: the social construction of security issues (who or what is being secured, and from what) is analyzed by examining the “securitizing speech-acts” through which threats become represented and recognized.”<sup>79</sup> Under this conceptualization, security is the outcome of a societal conversation that defines in-groups and out-groups, threats, attacks, and warfare itself. Various groups continually redefine the friend/enemy divide that determines what objects, actions, and events are perceived as security threats.

In their book *Security: A New Framework for Analysis* Barry Buzan, Ole Waever, and Jaap de Wilde detail this new structure with which to assess security. First, they argue, to separate it from more mundane political issues, security is about survival.<sup>80</sup> The referent object of security can change, but it is always about survival. When people begin to talk about security, they are talking about the survival of a particular entity, organization, or system. Thus, the referent object of security can be a particular

---

<sup>79</sup> Williams, “Words, Images, Enemies,” 513.

<sup>80</sup> Buzan, *Security*, 21.

geographic unit, intergovernmental system, political party, an entire culture, or any other object that competes for survival.

The topic of security is often used to frame the question of public policy as one of survival. In doing so, the framer must establish the referent object by appealing to the right subset of groups amongst which people divide their loyalties. The most powerful referent object in the modern era is the state. People cast aside many different loyalties—loyalty to religious beliefs, loyalty to family members, etc.—in order to actively defend the security of the modern state. Likewise, Niebuhr considered society the most important referent object. He quoted Briand to support the idea that society's right to live supersedes all other rights: "There is no liberty, time honored though it may be, whose exercise can be permitted to endanger the nation's right to live. The right that is above all other rights is the nation's right to live and to maintain its independence and pride."<sup>81</sup>

Reframing security issues involves drawing friend/enemy and in-group/out-group divides. Williams asserts that security groupings are primarily determined by the friend/enemy or foreign/not foreign lines of demarcation.<sup>82</sup> The Gurney-Wadsworth Bill (1945) provides an excellent example of securitization discourse and the interplay between various values, divides, and referent objects. The bill recommended a mandatory one year of military training for all males between the ages of eighteen and twenty-one, followed by four years in the reserve.<sup>83</sup> Undoubtedly, universal military training for all young males increases the security of the state against external threats. However, it may decrease the security of other referent objects, like unions. Ultimately the bill failed because it was opposed by, among others, labor unions. Labor unions

---

<sup>81</sup> Niebuhr, *Moral Man and Immoral Society*, 228.

<sup>82</sup> Williams, "Words, Images, Enemies," 517.

<sup>83</sup> Weigley, *American Way of War*, 368.

securitized the Gurney-Wadsworth bill with a different frame of reference: it was a threat to union survival. For fear that striking workers could be called up from the reserves into active service and be ordered to perform their own jobs, those loyal to the labor unions were able to defeat the bill.

Securitization requires more than reframing friend/enemy divides. It also demands framing events themselves as “attacks,” or “acts of war.” Prior to the Japanese bombing of Pearl Harbor, an isolationist attitude predominated among American citizens. Many felt that the United States was not under attack “until bombs actually drop in the streets of New York or San Francisco or New Orleans or Chicago.”<sup>84</sup> Long before the Pearl Harbor attacks, President Roosevelt had begun to securitize Nazi aggression as attacks on four essential human freedoms: freedom of speech, freedom of worship, freedom from want, and freedom from fear. During his State of the Union Address in January, 1941, he said “At no previous time has American security been as seriously threatened from without as it is today.”<sup>85</sup> Roosevelt spent years trying to securitize events taking place thousands of miles away as attacks on freedom, opening the door to actions such as the Lend-Lease Act (1941) that some people considered acts of war. The Japanese attack on Pearl Harbor proved to be the event that instantly securitized nearly everything taking place around the globe. The narrative was now unambiguously centered on war.

Buzan defined securitization itself as the move that takes politics beyond the established rules as special politics.<sup>86</sup> With such a relativistic definition, securitization is postmodern in the first sense. That is, the way people interpret and prioritize events

---

<sup>84</sup> Dudziak, *War Time*, 47.

<sup>85</sup> Dudziak, *War Time*, 45.

<sup>86</sup> Buzan, *Security*, 23.

determines how issues become “securitized”. Furthermore, in the political discourse, securitization can enlist the rhetoric of any set of intrinsic values, and can play them off against one another. For example, security can pit a right to live against freedom of choice.

In a postmodern system, the prime referent object of security discourse changes from the modern state to something else, and people cast aside loyalty to the state to defend the new object. This new referent object could be nearly anything: a corporation, an idea, a value, or even humanity itself. Buzan recognizes that states are not the only referent objects in securitization, but that even the European Union or principles such as an international society can be invoked as referential objects.<sup>87</sup>

Theoretically, the United States can be viewed as a postmodern referent object because it elevates certain values above any particular geographic or political grouping. Specifically, it was established by a Declaration of Independence that affirmed equality among men and an inalienable right to life, liberty, and the pursuit of happiness. The Declaration stated that the very purpose of government is to secure these rights; that just power comes from the consent of the governed. The Declaration does not necessarily restrict the application of these principles to a specific geographic state. The Constitution can be thought of as merely the second iteration (after the Articles of Confederation) in the application of these principles to humanity.

However, the governance prescribed in the Constitution is necessarily restricted to the geographic boundaries described therein. American service men and women swear to defend the governance established under its rules, not to defend the principles in the Declaration of Independence. To control the expansion of the Declaration’s principles

---

<sup>87</sup> Buzan, *Security*, 55.

beyond the constraints of the Constitution would require change to the current system. For example, people who believe fervently in the values of equality and rights—individuals who believe those values trump the importance of state sovereignty—could advocate for the United States to provide Constitutional protections to people around the world. The requisite for this coverage might be a sworn loyalty to the US Constitution and the contribution of some amount of money to the Federal Government. After all, the US Government demands little else of its current citizens.

Within the current system, Buzan describes five sectors of security: military, environmental, economic, societal, and political.<sup>88</sup> In the societal sector, security is about identity and about identification of people with particular social groups.<sup>89</sup> The mass migration of populations across national borders—for employment or to flee conflict, for example—is an example of a threat to societal security.<sup>90</sup> Despite its classification as one of the five sectors, Buzan recognizes that much of what state militaries do has nothing to do with security.<sup>91</sup> Furthermore within the military sector, he notes that when securitization is focused on external threats the discourse revolves around capability, but there is no correlation between external military capability and its securitization as an issue. He cites as an example the fact that democratic states do not fear each other's capabilities.<sup>92</sup>

Williams explained the dichotomy between military security and societal security as follows: military security holds sovereignty as its ultimate criterion, whereas societal

---

<sup>88</sup> Buzan, *Security*, 5.

<sup>89</sup> Buzan, *Security*, 119.

<sup>90</sup> Buzan, *Security*, 121.

<sup>91</sup> Buzan, *Security*, 49.

<sup>92</sup> Buzan, *Security*, 51.

security replaces sovereignty with identity.<sup>93</sup> Nonetheless, both of these criteria can be securitized and presented as threatened values that require emergency measures. For instance, leading up to Pontiac's Rebellion the Colonists perceived the security threat as Indians on the frontier. However, Britain's three-pronged response to the threat—to halt white settlements, garrison the western settlements, and tax colonies to pay for it—rankled colonists.<sup>94</sup> The colonists viewed Indians as a foreign enemy, but Britain's response seemed to be aimed at pacifying this foreign threat at the colonists' direct expense. Such a response was one of many speech acts that started to redefine the friend/enemy divide in colonial America. To some colonists, the British Empire was becoming an out-group, an enemy, a threat.

In another example, following the Civil War southerners viewed the Ku Klux Klan as their primary security apparatus even after it was outlawed by President Grant.<sup>95</sup> To many southerners, the Federal government fell on the other side of the friend/enemy divide during Reconstruction. This example shows the importance of loyalty as a driving factor in security arrangements; Southerners were more loyal to a local, extra-governmental organization that protected their particular interests. However, this example highlights the greater importance of the threat of force: military capability vis-à-vis any political entity that might oppose your security interests. The south's military capability had been dismantled, and thus it could not fully defend its interests. In other words, people can define their security interests however they want to, but they can only secure them inasmuch as their military capability can defend them.

---

<sup>93</sup> Williams, "Words, Images, Enemies," 519.

<sup>94</sup> Millett, *For the Common Defense*, 52.

<sup>95</sup> Millett, *For the Common Defense*, 260.

Historically, geography plays a large role in defining the lines of loyalty. People are generally more loyal to those with whom they interact often, and great geographic distance has been (until recently) an impediment to regular interaction. However, new technologies have greatly diminished the degree to which geographic distance restricts social interaction. Online social networks, for example, bring together like-minded communities of people around the globe. They do so regularly and without regard to physical geography. Technology effectively changes the geography of the world; it brings digitally-connected people closer to one-another, and it exacerbates the dividing lines between populations with unfettered internet access and those without. This new geography can be considered *effective geography*. It matters because it changes perceived threats, it has the potential to change people's loyalties, and it alters the global security discourse.

In addition to effective geography, neo-institutionalism has helped change the dividing lines between various populations. As Williams points out, "a successful securitizing act is related to the social and institutional position of the speaker, and thus to forms and relations of power well beyond the linguistic element of the speech-act in itself."<sup>96</sup> Therefore, the greater the legitimacy of the speaker, the greater the potency of the securitization speech-act becomes. Such institutional legitimization is the focus of a burgeoning body of work in International Relations called neo-institutionalism. Williams implores his readers to continue the work necessary to draw clear links between securitization theory and the epistemological, normative, and processual focus of this novel field of study.

---

<sup>96</sup> Williams, "Words, Images, Enemies," 525.

Securitization, because it is a human act of communication, is also subject to the frailties of human thought. Daniel Kahneman, in his book *Thinking, Fast and Slow*, describes one of the many problems with human cognition as the use of heuristics. Kahneman defines a heuristic as “a simple procedure that helps find adequate, though often imperfect, answers to difficult questions.”<sup>97</sup> The substitution heuristic, for example, is the replacing of a difficult question with a simpler one to which the individual already has an answer. Uwe Reinhardt provided a clear example of a security-related use of the substitution heuristic on the editorial pages of the *New York Times*, in an article titled “Why I Would Raise Taxes.”

I believe that the Air Force, particularly, is overfunded relative to our forces on the ground, and perhaps the Navy as well. ... Furthermore, I have heard some persuasive presentations at Princeton suggesting that if we factor in our vulnerability to online attacks and the exposure of our Navy to hostile missiles - making our mighty aircraft carriers into sitting ducks - we may actually have to spend much more than we now do on the military. I can only hope that the Pentagon will learn how to manage the resources it is given more smartly.<sup>98</sup>

Effectively, Reinhardt substituted a question about tax revenue (a very complex, multifaceted public policy question that can be securitized an infinite number of ways) with a question about what he read about military vulnerability.

Kahneman attributes some of this behavior to the availability heuristic: the propensity to make decisions based upon information that is most easily called to mind, rather than take into account an entire body of evidence with all of its ambiguous and conflicting information. For his editorial purposes, it sufficed for Reinhardt to call to mind the things he had read about online attack vulnerabilities recently than to unearth a body of evidence about a spectrum of military risk; not to mention it was simpler to

---

<sup>97</sup> Kahneman, *Thinking, Fast and Slow*, 87.

<sup>98</sup> Uwe Reinhardt, “Why I Would Raise Taxes” *New York Times* 18 Nov. 2010: A23.

substitute this simple question for the complex challenges of allocation of public money. Therefore, he answered the question about taxation with a conclusion about providing more money to the military to protect against certain vulnerabilities that were easily called to mind.

Securitization is also subject to exploitation by political groups who bundle their interests into the security rhetoric for purposes entirely outside the realm of military security. For example, the Preparedness Movement of the 1900s sought to increase the military size and strength for defensive purposes prior to World War I. The movement, like nearly all popular political platforms in the United States, was not necessarily coherent or focused, but exploited the rhetoric of security as an expedient to various goals like local construction. Millett summed it up brilliantly: “like all American mass political phenomena, the Preparedness movement contained policy contradictions and antagonistic goals and represented the diverse interests of many political groups.”<sup>99</sup> These political groups recognize that some defense spending has benefits beyond military security, as in the case of the construction of interstate highways, improved public education, and technological research and development.<sup>100</sup> Each of these securitizing speech-acts aims to shape a “truth” for a particular purpose.

Many of the speech-acts of the securitization process are designed to instill beliefs in people as to what threats are most prominent and what military tools are best suited to defend against these threats. In the case above, Reinhardt demonstrates the salience of the cyber threat today. Likewise, one hundred years ago Army Air Corps Brigadier General Billy Mitchell sought to sway decision makers to see the prominence of the air

---

<sup>99</sup> Millett, *For the Common Defense*, 338.

<sup>100</sup> Millett, *For the Common Defense*, 534

threat. His securitizing speech-acts, which included the bombing demonstration against the battleship *Ostfriesland* and the publication of the book *Winged Defense*, aimed to justify greater investment in airpower.

Part of the security conversation today takes place between pro-defense and anti-tax republicans. Richard Kohn, professor emeritus of history and peace, war, and defense studies at the University of North Carolina at Chapel Hill, describes the evolution of this debate over the past twenty years:

I remember talking to [former Republican House Speaker] Newt Gingrich during the 1990s Republican Revolution, and I asked him whether the party was more supportive of tax cuts or a strong national defense, and he didn't hesitate to say 'tax cuts', and that was a dozen years ago, before anyone heard of a tea party that now probably outnumbers defense hawks two-to-one in the Republican Party.<sup>101</sup>

This debate will shape the future military force, and it will not necessarily be driven by any objective security measures. Securitization will take place; parochial interests will be bundled into the discourse of security. Former Librarian of Congress Daniel Boorstin said Americans belong to consumption communities—in the 1970s they were either Chevy or Ford people, for example. Undoubtedly, the political conversation will exploit even such mundane groupings in order to securitize issues for individual interests.

The concept of security can be explained and understood through the novel theories of securitization and security as identity. Security is a subset of politics, and politics is the discourse of identity, grouping, and securitization. War is politics carried on through violent means, and it stems from the inexorability of conflict and force in

---

<sup>101</sup> James Kitfield, "Compromise, or We Shoot the Pentagon", *NationalJournal.com* 16 Aug 2011, online, Internet.

human affairs. Postmodern warfare is not peace; the postmodern era is not the end of history.

### **Hypothetical Postmodern Warfare**

In the short section below, I present a fictional vignette that portrays the character of postmodern warfare. The story depicts a post-national global political structure, postmodern discourse between the civilian and military segments of society, and post-industrial technology. In the subsequent chapters of this book I analyze each of those dimensions in greater detail.

*Two rival factions of a politically active hacker community had grown into global prominence by the middle of the twenty-first century. One of the factions, dubbed E-Just, sought to defend the idea of equal justice for all human beings. A rival faction, the self-proclaimed Ubermensch, clung to the Nietzschean ideal of transcending human misery through the advocacy of excellence. Each of these rival factions had come into conflict with state power over the past dozen years. The reasons were plentiful: for failure to pay taxes to numerous governmental entities, for hacking attacks that shut down the online operations of governmental departments, and many more.*

*Despite continuous conflict with governments, these hacker communities had begun to gain the trust of large segments of the population through their effective online defense networks. Prior to the establishment of these voluntary defense networks, some of the people exposed to cyber-attacks lost their entire life savings, identity, and credit history at the stroke of a key. Such hysteria ensued following a string of these attacks that people began to consider them the greatest threat to their personal security.*

*These novel security arrangements protected like-minded people from devastating cyber-attacks initiated by independent hackers and rogue states. These individual-level alliances happened somewhat fortuitously, as people who had aligned with one faction or the other began to notice a sort of immunity to large-scale hacking operations that took place under the guise of the group called anonymous. Television personalities, online commentators and bloggers began to share the story that joining one of these factions provided better cyber-security than the government. People, organizations, and even states from across traditional political boundaries vested their wealth in these new security structures rapidly.*

*Meanwhile, the guarantors of security in the modern era—geographically delineated governments—were depicted (mostly by online hacktivist commentary) as essentially worthless, although they had taken great effort to protect people within their jurisdiction. Despite the governments' reasonable success rate in thwarting cyber-attacks, people began to think of these attacks as their greatest vulnerability; they did not think the government was effective in defending against them. They also began to trust either the Ubermensch or E-Just hackers as their primary guarantor of security. Other organizations, such as the Catholic Church, waded into this societal re-grouping. The Pope highlighted to his millions of followers that E-Just provided a model for security more suitable to the dignity of mankind than the United States and its "culture of death."*

*More importantly, a small, elite avant-garde within each of these major online communities began to persuade senior government officials that they should shift their loyalty away from the state. Highly capable E-just sympathizers who had personal access to the US Secretary of Defense began to convince him that if he was truly loyal to*

*the principles of justice, equality, and human rights that the United States professed, he would uphold these principles first and foremost. He started to believe that it was right to pursue equality and justice even if it conflicted with the interests of a sovereign America. He did not overtly apostatize the United States. Instead, he gradually increased the frequency with which he delegated operational control of US forces to foreign entities engaged in humanitarian operations. United Nations commanders led larger and larger American units in their peacekeeping missions. An entire Army Division fell under permanent command of the European Defense Force, to employ as they saw fit.*

*Not coincidentally, the Defense Secretary had risen to his post in part by virtue of a unique self-education, which he attained almost completely online through major universities around the world. The introduction of free online higher education in 2012 by Coursera and EdX gently eroded one of the bases of state loyalty. Prior to the promulgation of this model, students who wished to pursue the most prestigious education had to physically move to the United States. In turn, they immersed in American culture and interacted as a member of American society. The new model allowed individuals to earn a prestigious degree from anywhere in the world. American students who selected this route of education found themselves stepping into a new culture as they pursued their studies. Their classmates introduced them to different cultural norms and ideas, but they often found much in common in terms of the principles to which they were most loyal.*

*Many people in the United States stopped paying taxes, and instead directed half of what they would have paid the federal government toward one of the two primary*

*groups of rival hacktivists. Decision makers within territorial governments deployed a number of measures to combat this lawlessness. First, the social security accounts of those who had failed to pay taxes were frozen for two years, and automatically cancelled after three years if taxes were not received. Government-sponsored healthcare was suspended after two years of failure to pay taxes. Governments even deployed armed forces within their borders to try to compel people through threat of force to pay their full taxes.*

*However, individuals were extremely well-armed against the government forces. Three-dimensional printing technology had become as affordable as a television twenty years earlier. With the advent of 3-D printing technology, wherever there was a computer there was also the ability to fabricate weapons. Hobbyists became highly skilled at designing effective weapons systems on their home computers and printing them out, and they could easily share their most effective designs across the internet.*

*In addition to being well armed, people were increasingly willing to sacrifice their opportunity for government health care and paychecks. The reason for such willingness was that the government's promises carried substantial risks amid the hacker milieu. Social security payments could be diverted by hackers, and online government medical records were altered or destroyed regularly. People mitigated these risks by joining E-just or Ubermensch, depending on their personal philosophical preference.*

*Rival hacktivist groups also effectively compelled many soldiers to shirk their nationalistic duty to uphold the state rule-of-law. Some of the soldiers who participated in forced tax collections were targeted by the hackers, and ended up losing their personal savings, credit, and identities. Although the percentage of soldiers subject to such*

*attacks was very low, the hackers targeted the most social-media savvy troops, and followed up their attacks with multiple postings and tweets from fictitious “troops” who had allegedly been targeted as well. The result was that people believed that about eighty percent of the military had lost their savings and identity to cyber-hackings despite the actual number being closer to five percent. Over the course of a few months, many of those soldiers who had not yet been targeted walked out of their roles and aligned with one of the two rival factions to guarantee their personal security from cyber-attack. Although they lost their paychecks and pensions, their current nest egg was secured. Too few troops were available to enforce the charges of desertion.*

*The problems that the United States government had in trying to restore order were compounded by a decision ten years earlier to invade a resurgent—and at times malicious—Russian Federation, who had aligned with China early in the 2020s. In that invasion, the US government had spent hundreds of billions of dollars to execute its prized concept of operations, AirSea Battle. This construct allowed the United States to display the core of its identity: high-technology state-on-state aerial and naval warfare. A coalition of allied forces joined together to employ F-35s in high-end air-to-air combat for the first time.*

*However, Norway and Denmark declared neutrality shortly after hostilities began. Their neutrality caused a novel complication due to the global pooling of supplies that they had agreed to allow Lockheed Martin to administer as part of the Autonomic Logistics Global Sustainment (ALGS) model born of the joint acquisition of the F-35. ALGS was comprised, in part, by a vast computer network that automatically scheduled parts deliveries to the eight original partners in the F-35 program. Upon*

*notification that Norway and Denmark would not join the allies to prosecute the war against the Russian Federation, the US federal government ordered Lockheed Martin to modify the ALGS algorithm such that the supply of parts favored those states who had joined the alliance. However, Lockheed Martin argued that it was bound contractually to leave the algorithm unchanged.*

*To complicate the matter further, both rival hacker factions threatened to catastrophically disrupt the ALGS system if the US government forced Lockheed to favor parts supply to other nations at the expense of Norway and Denmark. Those two states argued, reasonably, that the United States Government could not compel a multinational company like Lockheed Martin to void a contract with them based solely on their stated policy of neutrality in this unpopular conflict. The United Nations agreed with the neutral countries, and issued a declaration to that effect.*

*Furthermore, American soldiers were weary from a decade of rotational deployments that this fight had brought them. Conventional wisdom within the ranks was that senior defense leadership had grossly underestimated the cyber-threat, and had engaged in this war to try to validate their investment in conventional, modern industrial state-on-state warfare.*

*Postmodern Warfare had begun. Traditional military capability mattered less than the ability to destroy value in cyberspace. The capability to employ coercive violence was “democratized” into the hands of ever-smaller and more independent groups through novel technology. Sovereign states did not command the ultimate loyalty of the people within their borders. The military-civilian relationship was no longer*

*objective civilian control over the professional military; rival online factions provided security to a worldwide community of clients.*

*The problem for the United States of America was that it had organized, trained, equipped, and employed a modern force in an era of postmodern warfare. Looking back, one retired senior military leader regretted the force he had bet on when he helped build the future force thirty years prior. He recalled reading a book at the time that implored, “The problem with the future force is that it is an army.”<sup>102</sup>*

---

<sup>102</sup> Adams, *Army After Next*, 231.

## Chapter 3

### Global Political Structure

*God has made us the master organizers of the world to establish system where chaos reigns.*

*-- Senator Beveridge of Indiana*

*A state is the coldest of all monsters. Destroyers are they who lay snares for many and call it the state. They hang a sword and a hundred cravings over them.*

*-- Nietzsche*

### Background

*The global pooling of F-35 logistics resources seemed like a wise idea at the time. It was designed to solve pressing national fiscal problems during a very weak recovery from a global financial crisis. Looking back, it was a poor decision—from the perspective of sovereign states—to pool resources among nations and place the power of distribution in the hands of a private company like Lockheed Martin. In fact, it was the proverbial black swan.*

*Years before the global pooling decision was taken, Nicholas Taleb wrote a popular book called *The Black Swan*. In it, he detailed how the most profound and revolutionary changes come about from something that had never been contemplated, but that in hindsight seemed so completely obvious. Like the discovery of a black swan by people who had never seen anything but white swans, the shift of power from states to private corporations in light of this pooling decision now seemed so obvious, when at the time it had been inconceivable. States had been the dominant political unit since the Treaty of Westphalia in 1648. How could a seemingly minor agreement to share global logistics resources help alter the central political reality so profoundly?*

*The global pooling decision was not the only choice that shifted the center of political gravity away from states. The global financial crisis also put severe pressure on international unions like the European Union. Yet, counter-intuitively, those unions survived and even gained strength through the crisis. Those states that held the power to decide the outcome of the financial meltdown, such as Germany, held the union together at the expense of their state. As states struggled to solve their own financial problems, why had the EU not fractured into its historical makeup of dozens of individual, self-interested states? Why had Germany and Denmark thrown so much political capital behind the union, when they would have emerged from the crisis the strongest of the individual states had the union split?*

*Another decision that contributed to the demise of the state-based global political structure was the introduction of free online higher education. Competing brands vied for the membership of the most prestigious universities. Stanford, Duke, and dozens of other major colleges chose to join the startup Coursera, whereas Harvard and the Massachusetts Institute of Technology formed their own not-for-profit version of Stanford's for-profit model. Why had universities decided to offer a free version of their courses when so much of their income came from tuition, and even more from loyal alumni? These generous alums had established their identity while in residence, and now universities were moving toward a model that would remove so many of those loyalty-building symbols from the undergraduate experience: the student commons, the football games, the dormitories. Furthermore, students from around the globe could attend these new university courses online. No longer did they have to move to the United States and live among all the symbols and rituals that breed loyalty to America.*

Both a realist and a postmodernist explanation exist to make sense of the decisions described above. Although they appear to be anomalies, black swans that do not fit the anarchic global order paradigm, perhaps they really are international politics as usual. To the realist, the apparent cooperation evident in the global pooling decision was merely a cost saving measure. Instead of having to pre-purchase and maintain inventory of supplies, each state could purchase the supplies it needed exactly when it needed them. The Autonomic Logistics Global Sustainment model of the Lockheed Martin Corporation would have to invest in the warehouses and the global logistical supply chain to get the parts where they were needed when they were needed.

Likewise with the cohesion of the European Union: to the realist it was a temporary measure meant to stave off the drastic global economic drag that a fracture would have created. Germany was looking out for its own best interest when it spent massive capital to ensure the flow of money to the weaker states in the union. It simply would have cost Germany more if Portugal, Italy, Ireland, or Greece had failed, withdrawn from the Union and declared all of its debts invalid.

The same general narrative holds true in the case of free online education. With the advent of Coursera, by not joining the “Massive Open Online Course” (MOOC) mad rush, competing universities were missing out on the thousands of additional students they could shape. The self-interested options were simple: join Coursera or form a competing version.

On the other hand, in the eye of the postmodernist the social contract had expanded. That simple paradigm explained global pooling, the cohesion of the European Union, and the introduction of MOOCs. No longer were states the central political unit.

The people who made decisions on behalf of the states were happy to forego some measure of sovereignty if it brought economic security to a greater portion of humanity. University Presidents decided that it was unjust to offer their superior education only to people who were fortunate enough to have been born in the United States or have the means to travel there for schooling. Perhaps the new international order that so many people had foreseen before World War I had arrived with a postmodern global political structure. Perhaps Tuchman's portrait of the world before WWI, in which "The goal of a new international order in which nations would be willing to give up their freedom to fight in exchange for the security of law,"<sup>1</sup> had arrived.

Regardless of which view most thoroughly explains the global pooling decision, the cohesion of the EU, and the introduction of MOOCs, the global political structure today is firmly rooted in the modern era. The global political structure is still anarchic, and power is distributed among states, which remain the enduring central political unit. Like any living entity, states seek to assure their survival through their actions.<sup>2</sup>

Nonetheless, the state need not necessarily survive as the central political unit; people can choose to arrange their affairs differently. Senator Beveridge of Indiana pointed out that mankind may use his power of reason to establish system where chaos reigns. In the modern era people have chosen to establish the state. The state establishes system and mitigates chaos for the people within its borders. Contrarily, Nietzsche asserted the evil of the state: a cold monster that compels human behavior through use of the carrot and the sword.

---

<sup>1</sup> Barbara Tuchman, *The Proud Tower: A Portrait of the World Before the War (1890-1914)* (New York: Ballantine Books, 1962) 288.

<sup>2</sup> Kenneth N. Waltz, *Theory of International Politics* (Boston, MA: McGraw Hill, 1979) 91.

Historically, security arrangements that did not necessarily rely on the state have included the medieval practice of *patis* and its seventeenth-century descendant, contributions. *Patis* was a system of payments made by a village, town, district, or province to buy off an invading army from pillaging it. Contributions extended and formalized *patis*, in that the payments also secured for the contributor the bought-off army's promise of protection from other raiders. Furthermore, contribution payments became very regular, systematic and bureaucratic.<sup>3</sup> Even established states engaged thoroughly in this system.

The origin of the state can be traced to Ancient Greece. In Dorian settlements in the eighth century B.C. those who bore arms in defense of their Cretan city-state earned constitutional rights that were denied to the rest of the inhabitants. These constitutional arrangements garnered the people's loyalty above that to their families.<sup>4</sup> Since that time, the power of the state to centralize loyalty has waxed and waned, until the Treaty of Westphalia of 1648 solidified its status as the modern global political unit. Even if the state does survive, people need not allocate all social power to the state. Indeed, history illustrates that the state has not always been the central political reality to which people allocate the preponderance of power. Their allocation has traditionally been predicated on what they receive back from the entity to which they allocate power.

Vlahos traces the history of primary political power from clan to tribe to religion to nation-state.<sup>5</sup> His trace makes larger, more centralized forms seem inevitable, but that is not necessarily the case. The following examples demonstrate the timeless tension

---

<sup>3</sup> John A. Lynn, *Battle: A History of Combat and Culture* (Cambridge, MA: Westview Press, 2003) 135.

<sup>4</sup> John Keegan, *A History of Warfare* (New York: Vintage Books, 1993) 242.

<sup>5</sup> Michael Vlahos, *Fighting Identity: Sacred War and World Change* (Westport, CT: Praeger Security International, 2009), 40.

between centralized power and decentralized forms. These conflicts highlight armed conflict as a manifestation of the grouping function of politics.

The first example displays centralizing power. The French monarchy of the seventeenth century faced repeated conflict from sections of the territorial French nobility.<sup>6</sup> Territorial Lords commanded tremendous loyalty and held substantial amounts of war materiel—physical instruments of coercion. They and their men frequently engaged in armed conflict with nearby centralizing political elements. Not until the Fronde in 1658 did territorial lords finally cease combat against the centralizing royalty in France.

The second example displays a back-and-forth discord between centralizing and decentralizing forms of power. During various dynasties in China, peasants rebelled against the central authority when they could. The Chinese state was an administrative structure staffed by 40,000 officials focused on a succession of dynasties able to win and hold their position through military prowess.<sup>7</sup> In certain regions during the Manchu dynasty, people became hostile to the central rule and they began to drive the discourse to declare the dynasty “alien.”<sup>8</sup> The Manchu dynasty was the last dynasty to rule China, and was replaced by the Republic of China in 1911.

The Japanese Meiji restoration, the third example, is a story of centralizing power. American Commodore Matthew C. Perry’s visits to Japan in the 1850s sparked anti-foreign movements among the various Tokugawa shogunates. These shogunates formed Japan’s feudal system of government at the time. In response to these scattered

---

<sup>6</sup> Theda Skocpol, *States and Social Revolutions: A Comparative Analysis of France, Russia, and China* (New York: Cambridge UP, 1979) 52.

<sup>7</sup> Skocpol, *States and Social Revolutions*, 69.

<sup>8</sup> Skocpol, *States and Social Revolutions*, 78.

movements, Japanese Samurai centralized the power of regional shogunates and restored power to the Emperor.<sup>9</sup> Commodore Perry introduced a new element to the historical discourse in Japan: the clear technological superiority of the west. The response was a political re-grouping, a re-allocation of power within Japan in response to external stimuli.

The example of Sparta in the fifth century B.C. presents political groupings and regroupings that defy categorization as either centralizing or decentralizing power shifts. In 480 B.C. Sparta considered Persian aggression to be the primary threat to Greek freedoms and so aligned with Athens, and even acquiesced to the Athenian strategy that led to the loss of the three hundred at Thermopylae. Later, when Sparta perceived the greatest security concern as its loss—to Athens—of primacy among Greek city-states, Sparta enlisted the aid of the Persians to defeat the Athenians in battle.<sup>10</sup> So the grouping function of politics played out through war: Spartans fighting alongside Athenians to defeat the Persian threat; followed by Spartans aligning with Persians to defeat an Athenian threat.

Finally, the power of the Catholic Church vis-à-vis empires also changed over the course of centuries. By the eleventh century A.D., the church had grown significantly in power relative to emperors. It had acquired vast amounts of land, often by charitable bequest, that it supplied to rulers of military fiefs.<sup>11</sup> Land, which provided the basis of wealth in the eleventh century, brought power to the church and thus placed it in conflict with emperors and kings. Furthermore, the Counts of Champagne France were frequently at odds with two competing authorities, French Kings and the Pope. Absent

---

<sup>9</sup> Skocpol, *States and Social Revolutions*, 100.

<sup>10</sup> Keegan, *History of Warfare*, 257.

<sup>11</sup> Keegan, *History of Warfare*, 289.

royal restrictions on trade, the counts were able to establish the rules of the periodic markets that were the basis of trade in the early thirteenth century.<sup>12</sup> The quarrels that subsequently arose subsided only when conflict was discursively redefined and political groupings were realigned.

Lynn describes this push and pull between Lords, Kings, and Bishops. “The decay of royal authority in the ninth century, after the death of Charlemagne and with the assaults on Europe by Vikings, Magyars, and Islamic raiders, saw political and military power fragment, often down to the level of local lords in their castellanies, areas best defined militarily as small domains based on a fortified site, or castle.”<sup>13</sup> From that point knights took on a Hobbesian cast, seeing no power capable of enforcing a peaceful behavior or restraining their greed. The church tried to constrain the warrior nobility through discourse, as Bishop Guy proclaimed the Peace of God in 975 to protect the poor, and the Council of Toulouges (1027) established the Truce of God to prevent fighting at certain times of the year.<sup>14</sup>

Pope Urban II used narrative and diplomacy to create a common enemy to unite Christendom: non-Christians. He preached of the sinfulness of infighting among Christians, and recalled the idea of the Truce of God—an armistice at Lent and on holy days—at the Council of Clermont in 1095. To complement the idea of commonality among Christians, his sermons highlighted the Muslim Turks’ advance into the holy

---

<sup>12</sup> Janet L. Abu-Lughod, *Before European Hegemony: The World System A. D. 1250-1350* (New York: Oxford UP, 1989) 58.

<sup>13</sup> John A. Lynn, *Battle: A History of Combat and Culture* (Cambridge, MA: Westview Press, 2003) 103.

<sup>14</sup> Lynn, *Battle*, 104.

lands and Byzantine Christianity. By painting a portrait of a common enemy, Urban II redefined foreign, and introduced the age of Crusades.<sup>15</sup>

The above examples show that people have not always allocated social power to the state; and loyalties and groupings change. In-groups and alien groups are redefined, and social power is allocated along different lines throughout history. The question remains, from where does social power originate? Niebuhr's insight proves valuable:

All social power is partially derived from the actual possession of physical instruments of coercion, economic or martial. But it also depends to a large degree upon its ability to secure unreasoned and unreasonable obedience, respect and reverence.<sup>16</sup>

In other words, social power comes from physical power and loyalty. To move beyond the modern era, social power must migrate from states to something else.

The anomalies presented at the beginning of the chapter suggest two possible alternatives as to where social power might migrate: multinational corporations or interstate unions. Using Niebuhr's insight as a point of departure to assess this migration, the remainder of this chapter is divided into three sections.

In the first section I describe the inertia of the modern era. States retain possession of nearly all physical instruments of coercion and also hold the strongest ability to secure loyalty—unreasoned and unreasonable obedience, respect and reverence. The *status quo* allocation of power creates the inertia of the modern era.

In the second section, I describe the seeds of revolutionary change that exist in new distributions of physical instruments of coercion and in new identities and patterns of loyalty. These seeds of revolutionary change help to create the conditions that might

---

<sup>15</sup> Keegan, *History of Warfare*, 291.

<sup>16</sup> Niebuhr, *Moral Man and Immoral Society*, 237.

move the global political structure into a postmodern form, but their effects must be tremendous and revolutionary.

Finally, in the third section I assess the development of a postmodern global political structure as wrought by the anomalies presented above.

## **Inertia of the Modern Era**

### ***Physical instruments of coercion***

Modern instruments of coercion are plentiful and varied. They include bullets, soldiers, aircraft, missiles, bombs, rockets, and nuclear weapons, to name but a few. These instruments of coercion are allocated almost exclusively to states. States budget a portion of their resources to develop and maintain such military capability in anticipation of future conflict. Keegan even asserts that government monopolization over gunpowder production was a key to the rise of the modern state.<sup>17</sup>

No matter how military capability is divided for analysis, the state is the primary wielder of its power. In fact, the assumption that the state is the fundamental unit of political and military power is so ingrained into the modern worldview that it usually remains unstated. For example, a search for “military capability” on the website Wikipedia redirects the user to a list of countries. The website lists approximately 150 countries in alphabetical order with information about their military budget, number of aircraft, tanks, troops, ships, and nuclear weapons. Further information about military capability is accessible through the links “list of countries by military expenditure”, “list of countries by number of troops”, and “list of countries by military expenditure per

---

<sup>17</sup> Keegan, *History of Warfare*, 310.

capita.”<sup>18</sup> In short, military capability is practically incomprehensible outside of the framework of the state.

Furthermore, multinational or international organizations are effectively impotent, without physical instruments of coercion. Despite some observers’ views of the UN as the best instrument to perpetuate worldwide peace,<sup>19</sup> it has very little power relative to that of states. As Millet noted, “The capacity of the United Nations or any other supernational authority to deal with [regional] conflicts is severely limited by shortages of money, troops, military expertise, and the political will of the member nations to address the problems of interstate war, civil war, and terrorism.”<sup>20</sup>

In addition to martial instruments of coercion, Niebuhr’s insight also pointed to economic instruments as a source of social power. Again, states hold the preponderance of this coercive device. According to a report entitled “Corporate Clout: The Influence of the World’s Largest 100 Economic Entities” only five of the fifty largest economies—as measured by gross domestic product for states or revenue for corporations—were corporations. Ninety percent of the top fifty are states.<sup>21</sup> Interestingly, states have *increased* their share of economic power relative to corporations since the year 2000, when twelve of the top fifty economies were corporations.<sup>22</sup>

---

<sup>18</sup> “Military Capabilities,” *Wikipedia* 5 Oct. 2012 online, Internet, available: [http://en.wikipedia.org/wiki/Military\\_Capabilities/](http://en.wikipedia.org/wiki/Military_Capabilities/).

<sup>19</sup> Keegan, *History of Warfare*, 384.

<sup>20</sup> Allan R. Millet, Peter Maslowski, *For the Common Defense: A Military History of the United States of America* (New York: The Free Press, 1994), 647.

<sup>21</sup> Tracey Keys and Thomas Malnight, “Corporate Clout: The Influence of the World’s Largest 100 Economic Entities,” *Global Trends* 5 Oct. 2012 online, Internet. Available: <http://www.globaltrends.com/knowledge-center/features/shapers-and-influencers/66-corporate-clout-the-influence-of-the-worlds-largest-100-economic-entities>.

<sup>22</sup> Sarah Anderson and John Cavanagh, *Top 200: The Rise of Corporate Global Power* (Washington, DC: Institute for Policy Studies, 2000) 9.

Power is allocated to those entities with actual possession of physical instruments of coercion. Today, the overwhelming balance of that power is in the hands of territorial state governments. The current distribution of those instruments would have to change dramatically to move toward a postmodern global political structure. States would have to cede control of their coercive instruments to corporations or multinational security apparatuses, for instance, and that is unlikely to happen any time soon. The *status quo*, the modern, state-centric global political structure has tremendous inertia.

### ***Loyalty – Unreasoned and Unreasonable Obedience***

Niebuhr's second element to determine the allocation of social power--unreasoned and unreasonable obedience, respect, and reverence—is also called loyalty. Like the modern allocation of the physical instruments of coercion, loyalty today is strongest to the state. This situation creates an inertia that prevents movement toward postmodern forms of global political structure. For example, one form of postmodern governmental structure is the United Nations. Loyalty to the UN is low. Modern states use it as a tool to achieve their own interests. As an example of this low level of loyalty, the UN at one point instigated a loyalty program in which it invited employees to quit if they found it difficult to place loyalty to the UN above loyalty to their government.<sup>23</sup> However, their measure of loyalty was grounded in loyalty to the state. In a sort of circular rationale, they reasoned that individuals' ultimate loyalty to their state is best served through work towards peace and prosperity brought about through loyalty to international institutions like the UN. That is, place loyalty to the UN above loyalty to your state in the short term and you will best serve your state in the long term.

---

<sup>23</sup> "United Nations: Higher Loyalty," *Time Magazine* 18 Oct. 1954 online, Internet. Available: <http://www.time.com/time/magazine/article/0,9171,936505,00.html>

Unreasoned and unreasonable human obedience arises from both the carrot and the stick. That is, people are most loyal to those individuals and institutions that offer something in return. The offer can be positive (a carrot), or negative (a stick). In the positive instance, the trade might be loyalty to an entity that offers the hope of upward social mobility. That hope can be something specific like a social security number and the promise of future cash payments, or it can be something less tangible like the possibility of a prestigious job title. In the negative instance, loyalty can be coerced through the maltreatment of people who display disloyalty. However, this negative type of loyalty is more precarious than loyalty bred through positive means.

History is replete with examples of the state mastery of loyalty. Skocpol points out that wealthy Chinese families aspired to participate in a universal realm of Chinese life that peasants could not through state service. Only the imperial state united China into one society. The allocation of social power to the Chinese state was solidified by aspirants to participation in state affairs.<sup>24</sup> The prestige of state employment was sufficient to entice citizens to seek employment from the state.

The state performed numerous functions to ensure that imperial service remained more prestigious than service in regional jurisdictions. For example, imperial public servants were systematically indoctrinated with propaganda to convince them of the inherent superiority of imperial China over their region of origin. Furthermore, the state frequently juggled the location of assignments from region to region so as to prevent officials from forming strong bonds of loyalty to a particular region. Additionally, regional officials were assigned overlapping jurisdictions with other officials, a practice

---

<sup>24</sup> Skocpol, *States and Social Revolutions*, 70.

that bred regional competition to ensure the emperor maintained control.<sup>25</sup> The Chinese imperial state also encouraged people outside its borders to provide the first line of defense against invaders. China bought the loyalty of outsiders through subsidies and grants of territory, which encouraged the partly-sinicized border peoples just outside the Great Wall to defend the state from invading nomads.<sup>26</sup>

China is not an isolated case of systematic consolidation of power at the state level. In France, “Bonaparte wielded the symbols, rituals and propaganda of a highly generalized nationalism to consolidate power. His institutional contributions outlived him: a professional officer corps and a national army.”<sup>27</sup> In a more coercive example, Peter the Great of Russia made lifelong military service mandatory for every adult male noble. Like the Chinese officials, these nobles were shunted about from assignment to assignment throughout their tenure, which kept them loyal to the state rather than a particular region or class of people.<sup>28</sup>

Similar practices to those described above exist in the United States today. Officers in all branches of the military are shifted from assignment to assignment throughout their careers. At least in part, this systematic movement mitigates the risk that regional loyalties will usurp ultimate loyalty to the state.

Additionally, simple tradition and heritage of a geographic location can generate tremendous state loyalty. Scotland, for example, bears a rich history of state loyalty, even during the time during which they have been a part of the powerful United Kingdom of Great Britain. The Mel Gibson movie *Braveheart* paints the portrait of fiercely loyal

---

<sup>25</sup> Skocpol, *States and Social Revolutions*, 70.

<sup>26</sup> Keegan, *History of Warfare*, 202.

<sup>27</sup> Skocpol, *States and Social Revolutions*, 195.

<sup>28</sup> Skocpol, *States and Social Revolutions*, 86.

Scotsmen. Tellingly, Scots recently won an opportunity to put forth a vote on independence from the UK. In a decentralizing move, British subjects living in the Scottish state will have the opportunity to vote for national independence in 2014.<sup>29</sup>

In a similarly decentralizing move, voters in the Catalonia region of Spain gave a huge victory to pro-independence parties on both the right and left side of the political spectrum in 2012. Not only has the European Union heard calls for fragmentation from states, but the state of Spain has now heard a strong call for fragmentation at the sub-state level. Like Scotland, Catalonia will hold a referendum on independence in 2014. However, the reality of the political situation in Spain highlights the true, state-centric nature of Catalonia; “Only the central government can authorize such a vote, and [Spanish Prime Minister] Rajoy has said it won’t do so.”<sup>30</sup> Interestingly, in that case, Catalonia’s nationalist leaders have said they would seek legal support in European Union or international law. For a sub-state region to seek legal support from international law in its bid for independence from a state sets the stage for post-national conflict.

Of course, this variety of conflict is not unique to the twenty-first century. Indeed, Scotland and Catalonia serve as examples of historical continuity in their zeal for independence and autonomy. Furthermore, post-colonial conflict such as that between India and the United Kingdom that led to Indian and Pakistani independence was a movement in which inhabitants of India used every tool available—the international discourse of World War II, legislative acts, civil disobedience, etc.—to achieve their goal of political independence. However, truly postmodern warfare demands a preponderance

---

<sup>29</sup> Anthony Faiola, “Scotland to vote on independence,” *Washington Post* 16 Oct. 2012: A10.

<sup>30</sup> Jonathan House, “Catalonia Sets Independence Referendum,” *Wall Street Journal* 20 Dec. 2012: A12.

of social power in the hands of the international institutions and structures that determine the outcome of such conflict. Instead, in the case of India, the British government made the decision to allow for Indian Independence.

Paradoxically, international institutions, symbols, and rituals can solidify power in the hands of states as well. For example, the Olympic Games reify the status of states, as discussed in Chapter 2. Each athlete proudly represents his or her country in athletic endeavor, and only rarely are athletes permitted to compete without the official sanction of a state. Interestingly, the United Nations has recently engaged in making statements on the behalf of state power as well. Specifically, Ben Emmerson, the United Nations' special rapporteur on human rights and counterterrorism, issued a statement that said the US drone campaign in Pakistan "involves the use of force on the territory of another state without its consent and is therefore a violation of Pakistan's sovereignty."<sup>31</sup> Passports serve as another example of international norms that buttress state power. According to international standards, each individual who travels across state boundaries must present this form of identification, which is issued by the state, bears the name and colors of the state, and often includes some form of historical state propaganda meant to instill a sense of pride and loyalty.

Such symbolism creates unity, which is one basis for security. The *Minersville School District v. Gobitis* (1940) Supreme Court case presented an interesting test between the relative value of symbolic unity versus freedom. The case examined the question of whether the state could compel public school students to salute the flag of the United States if such an act went against personal religious beliefs. Elementary school

---

<sup>31</sup> Richard Leiby, "U.N. says U.S. drone strikes in Pakistan violate sovereignty," *Washington Post* 16 Mar. 2013: A7.

students Lillian and William Gobitis had been expelled from school for refusing to salute the flag, an act they considered to be the worship of an idol, which countermanded their beliefs as Jehovah's Witnesses. US Supreme Court Justice Frankfurter wrote the majority opinion in the case, which stated "we are dealing with an interest inferior to none in the hierarchy of legal values. National unity is the basis of national security."<sup>32</sup> He evoked Lincoln's dilemma, "Must a government of necessity be too strong for the liberties of its people, or too weak to maintain its own existence?" and then continued, "the ultimate foundation of a free society is the binding tie of cohesive sentiment. We live by symbols...[the flag is the symbol] transcending all internal differences, however large, within the framework of the Constitution."<sup>33</sup> Frankfurter's 8-1 opinion concluded that symbolic unity trumps the particular values that such symbols represent.

A postmodern form of global political organization remains distant because the vast majority of social power rests in the hands of the state. The physical instruments of coercion and the unreasoned and unreasonable obedience of the people belong to states. Despite the power of ideas with the potential to rearrange the global political structure—such as the socialist ideal of the early twentieth century—the *status quo* allocation of social power in the hands of the state is nearly immobile. Today, as it was during the zenith of the socialist ideal, patriotism is stronger than class solidarity.<sup>34</sup> The result of the modern allocation of weapons and loyalty is a kind of holy order that exalts the current anarchic international structure. As Buzan points out, this loyalty to the state is so deeply ingrained that it goes almost completely unrecognized: "the anarchic international order

---

<sup>32</sup> Dudziak, *War Time*, 58.

<sup>33</sup> Dudziak, *War Time*, 58.

<sup>34</sup> Tuchman, *Proud Tower*, 445.

is almost never invoked as a referent object [to defend and uphold] (even though the obsession with sovereignty implies support for this order).”<sup>35</sup>

### **Seeds of Revolutionary Change**

To enter a postmodern form of global political structure, the allocation of social power would have to undergo revolutionary change. The seeds of such change exist, both in terms of the physical possession of instruments of coercion and in terms of loyalty.

#### ***Instruments of coercion***

Terrorism, weapons acquisitions, nuclear proliferation, and numerous international developments are examples of the seeds of change that have been sown that could potentially change the allocation of the physical instruments of coercion.

Al Qaeda turned a couple dozen one-way airline tickets into substantial military capability on September 11<sup>th</sup>, 2001. This type of unpredictable, unsustainable terrorist military capability reallocates social power to the perpetrator when it drives the behavior and narrative of the victim. As this case illustrates, terrorists often drive states to grant recognition to their organization. For example, prior to the 9/11 attacks, the al Qaeda network was not a common household reference. Although a significant portion of intelligence analysts and regional experts knew a great deal about it, the group of terrorists was not part of the daily narrative across most of the world. In the eleven years that followed the attacks, the actions of the United States and its allies have granted al Qaeda a global identity and a central place in public discourse. Following the invasion of

---

<sup>35</sup> Buzan, *Security*, 106.

Iraq in 2003, al Qaeda in Iraq was born and subsequently gained prominence and recognition.

Terrorism has long been used as a tool to gain social power. The Real Irish Republican Army—a designated a terrorist organization in the United Kingdom and the United States—has used terrorism as a tactic to further its political goal of a united Ireland since 1997. Its predecessors had been using the tactic since the Irish War of Independence (1919-1921). Timothy McVeigh, who detonated a truck bomb that killed 168 people at a federal building in Oklahoma City in 1995, sought to inspire a revolt against the federal government. Ted Kaczynski specifically sent his Unabomber manifesto, *Industrial Society and its Future*, to *The New York Times* and *The Washington Post* in an effort to get a respectable readership for his views against technological development. Gavrilo Princip precipitated the First World War when he killed Archduke Franz Ferdinand in the name of Serbian nationalism. Each of these terrorists injected a loud voice into the public discourse, but in no case did their terror tactics elevate their ideals to a position of eminent power greater than the state.

Besides terrorism—a weak tactic used to try to reallocate social power—novel twenty-first century structures also sow the seeds of revolutionary change. The joint acquisition, development and production of the F-35 *Lightning II* provides an example. Daniel Goure wrote in the *Early Warning* blog:

One of smartest examples of the practical pooling of assets is the international program for the F-35 Joint Strike Fighter. A number of NATO allies including Great Britain, Italy, Netherlands, Canada, Denmark, Norway and Turkey are not only acquiring the Joint Strike Fighter but are participating in the development and production of the aircraft... Not only does the international program reduce the cost of acquiring fifth-generation fighters for all participants, but there will be tremendous advantages to be gained by virtue of the global supply chain,

availability of shared facilities and standardized procedures. When it comes to conducting actual combat operations, the “pool” of F-35s in NATO will be one of the smartest defense investments the alliance has ever made.<sup>36</sup>

This joint acquisition program was explicitly designed to establish a model for future weapons programs. As one of the program’s founding documents describes, the participants seek “to establish a model for international cooperative acquisition programs.”<sup>37</sup> However, Goure misses the fact that the F-35 development program is not a NATO program. Each sovereign state that entered into joint development did so based on a calculated cost/benefit consideration for itself. There is no “pool” of F-35s in NATO, nor is there intended to be. Each state in NATO will have sovereign authority to decide what assets to contribute to NATO missions if and when the need arises.

Another example of a postmodern seed of revolutionary change in the allocation of military power is the Peninsula Shield Force. The Peninsula Shield Force is a multinational security apparatus established in 1984 by the Gulf Cooperation Council (GCC). Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates established the GCC in 1981, to include a common market and a defense planning council. They began the council in light of their similar political systems based on Islamic beliefs, joint destiny, and common objectives. In 1984, GCC defense ministers created the 10,000-man Peninsula Shield Force. The force was based in Saudi Arabia under the command of a Saudi officer. The 1984 agreement also included a provision for Bahrain and Oman to receive \$1.8 Billion in aid from the richer members of the group in

---

<sup>36</sup> Daniel Goure, “Smart Defense and the International Program for the F-35 Joint Strike Fighter,” *Early Warning Blog* (Arlington, VA: Lexington Institute, 2012) online, Internet. Available: <http://www.lexingtoninstitute.org/smart-defense-and-the-international-program-for-the-f-35-joint-strike-fighter?a=1&c=1171>

<sup>37</sup> Joint Strike Fighter Production, Sustainment, and Follow-on Development Memorandum of Understanding (JSF PSFD MOU) online, Internet 17 Oct. 2012. Available: [http://www.jsf.mil/downloads/documents/JSF\\_PSFD\\_MOU\\_-\\_Update\\_4\\_2010.PDF](http://www.jsf.mil/downloads/documents/JSF_PSFD_MOU_-_Update_4_2010.PDF).

order to build up their military capability. However, only Saudi Arabia kept its commitment. The rest of the states backed out of this financial commitment due to their own financial troubles.<sup>38</sup>

Similarly, a group of fifteen states in west Africa developed a multinational security apparatus called the Economic Community of West African States (ECOWAS). In October 2012, the United Nations Security Council even decided to back a 3300-troop deployment from this consortium as a means to intervene in affairs in Mali.<sup>39</sup> However, on closer examination, this deployment, authorized by the Chairperson of ECOWAS on 13 Jan 2013, was intended to buttress state sovereignty. Specifically, ECOWAS sent troops to help the Malian army defend its territorial integrity against Islamists in its northern desert territories. Besides being employed to protect state integrity, it is also dependent entirely on individual state support. Nigeria, for example, in which ECOWAS is headquartered, has pledged 600 troops for the force.<sup>40</sup> It can retract this pledge in its own interest at any time.

NATO's new Strategic Concept presents another example of how power may be shifting out of the hands of the Westphalian nation-state. The strategy's focus moves away from counterbalancing other state powers and towards counterterrorism, cyber defense, and even cutting redundant capabilities across borders.<sup>41</sup> Counterterrorism is a less state-based mission than traditional state on state warfare because terrorism and cyber attacks can be state-agnostic. That is, they do not necessarily require the backing

---

<sup>38</sup> "Gulf Cooperation Council [GCC]," *Globalsecurity.org* 11 Jan 2013 online, Internet. Available: <http://www.globalsecurity.org/military/world/gulf/gcc.htm>.

<sup>39</sup> Anne Gearan "UN Security Council will be asked to weigh intervention plan for Mali," *Washington Post* 4 Oct. 2012: A14.

<sup>40</sup> "Ecowas authorizes troop deployment in Mali" *News 24* 11 Jan. 2013 online, Internet. Available: [m.news24.com/news24/Africa/News/Ecowas-authorizes-troop-deployment-in-Mali-20130111](http://m.news24.com/news24/Africa/News/Ecowas-authorizes-troop-deployment-in-Mali-20130111)

<sup>41</sup> Karen DeYoung and Edward Cody "New NATO strategy alters deployment of weapons systems" *Washington Post* 17 Nov 2011: A10.

of a state sponsor to be effective. Therefore, a strategy that focuses on defending against them concentrates less on countering state capabilities. Additionally, to cut redundant capabilities across borders is to reallocate the instruments of coercion in a manner that is not entirely clear. For example, when redundant capabilities exist, which state cuts their portion of the duplicate capability? If it is the state in the greatest financial trouble that cuts its portion of defense, then NATO's new strategy simply amplifies existing differences in state power. If this question is decided by other means, then the allocation of military capability is shifting in an unclear direction, depending upon what parties decide that question, and what the ground rules are for such decisions (and who sets the ground rules, of course).

In addition to NATO, numerous international venues are powerful enough to compel state behavior, at least in a discursive manner, if not coercive. For example, in May 2012, the International Atomic Energy Agency (IAEA) compelled Iran to agree to sign a framework for "potentially intrusive international inspections of secret military facilities."<sup>42</sup> However, the limited power of such international organizations becomes clear upon looking into the specifics of the deal. Although IAEA head Yukiya Amano said in May 2012 that he and the Iranian Nuclear Minister had made a "decision to agree," a formal agreement was still lacking more than six months later.<sup>43</sup>

Additionally, the advent of military actions within cyberspace in the twenty-first century stands to reallocate social power away from the geographically delineated state.

---

<sup>42</sup> Steven Erlanger, "Iran Nears Deal on Inspecting Atomic Site, U.N. Chief Says," *New York Times* 22 May 2012, online, Internet 11 Jan. 2013. Available: [http://www.nytimes.com/2012/05/23/world/middleeast/un-nuclear-monitor-strikes-deal-with-iran-reports-say.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2012/05/23/world/middleeast/un-nuclear-monitor-strikes-deal-with-iran-reports-say.html?pagewanted=all&_r=0)

<sup>43</sup> Aaron Sheldrick, "IAEA chief says not optimistic on Iran nuclear talks," *Reuters* 11 Jan. 2013 online, Internet 11 Jan 2013. Available: <http://www.reuters.com/article/2013/01/11/us-nuclear-iran-iaea-idUSBRE90A0AR20130111>

For example, cyberspace operations are difficult to attribute to a specific geographic location, and they have the potential to destroy military capability from across geographic borders almost instantly. The technology that enables the exploitation of the electromagnetic spectrum for war is such a tremendous seed of revolutionary change that it warrants a more robust analysis in a chapter dedicated to technology, chapter five.

Furthermore, the National Strategy Information Center points to a number of seeds of instability in the current political structure in its publication “Adapting America’s Security Paradigm and Security Agenda.” First, a proliferation in the number of weak and failing states as well as powerful armed groups will create the conditions in which non-state actors can affect stability and security at the local, regional, and, in some instances, even global levels. Second, this proliferation of actors creates new interactions and interrelationships between and among local, regional, and global players.

These two developments, in turn, foster the emergence of coalitions that will be comprised of states, armed groups, and other non-state actors. These formal and informal groupings, to achieve their aims, will employ irregular warfare tools and techniques. Faced with the security challenges of these hostile coalitions of actors, democratic states are beginning to foster coalitions of state and non-state allies to oppose them. Ultimately, these seeds of political change hold the possibility to grow into vast, sweeping, revolutionary change in the global political structure.<sup>44</sup>

For example, in Brazil politicians only enter some of the gang-run areas with the permission of the gang leader.<sup>45</sup> This situation exists despite the fact that the territories in question sit unambiguously within the geographic borders of the state of Brazil.

---

<sup>44</sup> Richard Shultz, et al., “The Sources of Instability in the Twenty-First Century: Weak States, Armed Groups, and Irregular Conflict,” *Strategic Studies Quarterly* (Summer 2011): 73.

<sup>45</sup> Vlahos, *Fighting Identity*, 124.

Moreover, in negotiations with the government, the communist guerilla group FARC—which has been engaged in armed conflict against the government for more than 50 years—demands changes to Brazil’s open trade economy.<sup>46</sup> Brazilians theoretically allocate power to their democratically elected state government. However, people across the globe allocate social power to gangs like FARC through their purchase of illicit drugs. The money exchanged across international borders for illegal drug trade — untaxed and outside of government control—is estimated at more than \$320 Billion per year worldwide.<sup>47</sup> With this redistribution of wealth, which is often used to purchase instruments of coercion, gangs hold an increasing ability to compel the government to negotiate the terms of its sovereignty.

Additionally, international business models like Google have accumulated vast wealth and power over the past dozen years. For instance, Columbia University Law professor Tim Wu says that “Google has more power over (freedom of speech on Internet) than either the Egyptian or the US government. Most free speech today has nothing to do with governments and everything to do with companies.”<sup>48</sup> He was speaking about the implications of a short video titled *The Innocence of Muslims* that sparked attacks all over the world. However, subsequent events highlighted where the real balance of coercive power lies. After Google refused to take down the anti-Muslim video, the government of Brazil fined one of the company’s Brazil-based executives

---

<sup>46</sup> Juan Forero, “Colombian rebels launch tirade as peace talks begin,” *Washington Post* 19 Oct 2012: A14.

<sup>47</sup> United Nations Office on Drugs and Crime, *World Drug Report 2012* (New York: United Nations, 2012) 60. Online, Internet 9 Jan. 2013. Available: [http://www.unodc.org/documents/data-and-analysis/WDR2012/WDR\\_2012\\_web\\_small.pdf](http://www.unodc.org/documents/data-and-analysis/WDR2012/WDR_2012_web_small.pdf)

<sup>48</sup> Craig Timberg, “Anti-Muslim video shows Web firms’ role as speech arbiters,” *Washington Post* 15 Sep. 2012: A1.

\$500,000 per day and had him arrested. He was released shortly after signing a promise to return to court.<sup>49</sup>

Nonetheless, the relationship between the state and multinational corporations is not usually so overtly coercive. Instead, Google usually appears to have the upper hand of decisional authority. Matthew Winkler and Mark Niquette point out in an article titled “What young democracies fear: YouTube” that Google receives thousands of requests from governments to delete content from its web servers. Counter-intuitively, the highest numbers of requests come not from totalitarian states, but from democratic states like Brazil, the United States, Germany, South Korea, and India.<sup>50</sup> Of course, totalitarian states do not have to request the deletion of content. They can simply block it or disallow internet access altogether. Despite their distaste for some of the content on the internet, the United States government spends \$30 Million per year on efforts to enable citizens within these totalitarian states to circumvent their governments’ firewalls.<sup>51</sup>

### ***Loyalty***

Robert J. Samuelson contends that “we are witnessing the exhaustion of the modern social order in which economic progress improved people’s lives and anchored their loyalty to the state.”<sup>52</sup> He points to economist Robert Gordon’s paper that outlines three “industrial revolutions,” each beginning with the introduction of a new technology: steam power, electricity, and computers. Gordon argues that the least revolutionary of these is the latter. Nonetheless, the “computer revolution” forms part of what many

---

<sup>49</sup> Jenny Barchfield and Juliana Barrassa “Google Executive Detained in Brazil,” *Washington Post* 27 Sep. 2012: A12.

<sup>50</sup> Matthew Winkler and Mark Niquette. “What Young democracies fear: YouTube,” *Washington Post* 4 Oct. 2012: A4.

<sup>51</sup> James Ball, “A Catch-22 for Internet-freedom tools,” *Washington Post* 22 Oct. 2012: A1.

<sup>52</sup> Robert J. Samuelson, “The Great Reversal?” *Washington Post* 8 Oct. 2012: A19.

commentators roughly equate to postmodernism. This type of conversation warrants a closer look at the relationship between loyalty and post-nationalism.

Symbols and rituals help generate the unreasoned and unreasonable obedience of man. Napoleon helped usher in the era of modern warfare through his manipulation of symbols and rituals. Hitler admired Mussolini's use of legionary symbolism and the Roman salute, which he adopted upon his election as Chancellor. He went beyond symbolism in gathering the loyalty of the German people, requiring servicemen to swear personal allegiance to himself.<sup>53</sup> Could an elite individual today wield the symbols, rituals, and propaganda of a generalized globalism to promote postmodern structures? Seeds of revolutionary change have been scattered across the globe, creating the potential to leech loyalty from states to other groups. These seeds include patterns of employment, private military firms, and a globally-connected monetary system.

One source of loyalty is a sort of lifelong ritual: patterns of employment and career development. Benedict Anderson pointed to career routes as decisive in the original formation of nationalism and nation-states.<sup>54</sup> Throughout the modern era, governments have employed people in a manner that creates aspirants to state affairs. Government officials are often granted honorific titles, afforded dignitary status, and handed levers of power. This behavior increases the prestige of governmental employment and in turn strengthens the loyalty of the people to their government.

Likewise, corporations' patterns of career development for their employees in the modern era have been largely geographically state-oriented. That is, people work for a company that is generally regarded as a state company. People perceive corporations as

---

<sup>53</sup> Keegan, *History of Warfare*, 367.

<sup>54</sup> Buzan, *Security*, 138.

belonging to a state—an American company, or a Russian company, or a Dutch company, for example—even though they are private and, in many cases, geographically distributed across many states. A company may have operations distributed throughout the world, and its employees may move from country to country in the course of their career development, but ultimately they view it as a subset of a particular state. Their aspirations—whether merely to remain employed or to climb the corporate ladder—strengthen their loyalty to that state.

Similarly, the structure of undergraduate education in the modern era promotes loyalty to the state. On the other hand, the growth of MOOCs is starting to change this ritual aspect of education. Instead of having to physically move to a location and reside there for the duration of the program, students can now study abroad from home. This model of education is apparently accelerating. Specifically, in February 2013 Coursera added twenty-nine Universities as contributors to its MOOC, including schools from Mexico, Spain, Hong Kong and Taiwan. Coursera now counts more than sixty institutional contributors. Coursera's competitor, EdX, added six institutions of higher education to its roster in the same month, to a total of eleven, including new adds from Australia, The Netherlands, Canada, and Switzerland.<sup>55</sup>

On the other hand, international organizational employment takes on a slightly different character in the twenty-first century. The emergence of global patterns of career options might be crucial signs of a new era. In that vein, Buzan points to an interesting emerging identity among employees: the “cosmopolitan-postnational elite.”<sup>56</sup> He argues that the global economy of the information age produces a winning class of symbolic

---

<sup>55</sup> Nick Anderson, “Free online courses’ growth boosted by foreign colleges,” *Washington Post* 21 Feb 2013: A13.

<sup>56</sup> Buzan, *Security*, 137.

systems analysts who do not feel ties to a particular state. It is a seed that promises to create more aspirants to participate in international organizational employment. A novel pattern of employment could create a political environment in which people dream of rising to the top of the United Nations, the International Monetary Fund, the World Bank, or the European Union. Young bureaucrats might take actions early in their career that detract from the power of their state but that set them up for good international organizational employment opportunities in the future. In this manner, international political organizations can rob states of the social power granted through the people's loyalty.

International organizations are not the only employers that alter the ritual of loyalty to the state. Another example involves private military firms. The Blackwater Corporation, for example, establishes a pattern of employment that can strain an individual's loyalty to the state. In 2011, for instance, the United Arab Emirates, a sovereign state, hired the American founder of Blackwater to establish a force of eight hundred of his employees to thwart internal revolt, conduct special operations, and defend oil pipelines and skyscrapers.<sup>57</sup> These employees, many of whom are US citizens, were put on contract by the UAE. It is conceivable that in the course of their operations their loyalties could be tested. For example, if the government of the UAE became oppressive against its people to the point that the United States government sent in military assistance forces to aid a rebel group, how would the American Blackwater agents respond? Would they remain loyal to the contract they have with their employer and potentially engage in direct armed conflict with American service men and women?

---

<sup>57</sup> Reuters, "UAE prince hires Blackwater founder to set up foreign force" *Washington Post* 15 May 2011: A8.

Would they feel a greater sense of loyalty to the United States and default on their contract? Might Blackwater try to prove itself loyal to the contract it signed with the UAE, in hopes of securing future contracts with other states and non-state groups?

Furthermore, when it comes to armed conflict, each of the parties to war—states, non-governmental organizations, corporations, private military firms, individual computer hackers—have an effect on the instigation, progress and resolution of war.<sup>58</sup> For example, when Iranian computer hackers initiate an attack on the American national banking system, as they did over the course of weeks during October, 2012, they feed the narrative that promotes the instigation of warfare.<sup>59</sup>

Money itself creates a powerful draw on loyalty, and has commanded the loyalty of countless men and women who sacrifice their family, their employer, their state, or even their professed deity to obtain more of it. Like Aldrich Ames and Judas Iscariot, spies, traitors, and apostates form the ranks of men who have put loyalty to money ahead of loyalty to their state or group. A novel form of currency called Bitcoin presents an interesting example of money—a symbolic store of value—that is not tied to the power of the state. Bitcoin is a form of currency derived from the efforts of computer code-breakers. It can be bought online using traditional, state-backed currency, and can be traded for a very limited number of goods and services, including hamburgers at select restaurants in Belgium. It is limited in quantity by the fact that a coin is mined by the solution of a computer puzzle that has a finite number of possible solutions, each of which takes hackers a period of time to solve. New coins are brought into circulation as a new problem is solved, and there is currently more than \$1.4B worth of Bitcoin in global

---

<sup>58</sup> Metz and Cuccia, *“Defining War for the 21st Century,”* 20.

<sup>59</sup> Siobhan Gorman and Julian E. Barnes, “Iran Blamed for Cyberattacks,” *Wall Street Journal* 13 Oct. 2012: A1.

circulation. Due to the fact that it is not backed by any state power, it has become the “darling of antigovernment libertarians.”<sup>60</sup> This symbol of stored value presents a fragile seed of revolutionary change toward postnationalism.

In addition to the preceding seeds of revolutionary change—emerging patterns of employment, and a globally connected monetary system—states under financial duress have recently made structural changes that alter the fabric of their internal political system. Again, these changes establish the conditions for shifting patterns of loyalty. For example, Portugal agreed to do away with its local jurisdictions in exchange for the ability to secure a fiscal bailout from the European Union and the International Monetary Fund. Portugal’s local jurisdictions are a significant part of Portuguese identity and culture, but they are compelled to replace them with more centralized forms. As Faiola writes:

This country the size of Indiana has more than 4,500 local governments, a constellation of towns and counties that E.U. and IMF officials see as emblematic of the inefficiencies that have plunged Portugal into a debt crisis. A move is underway to significantly reduce the number of local jurisdictions, which could force together some towns divided by centuries of petty rivalries while robbing others of a kind of local access to government that is seen in this whitewashed village of tiled courtyards as being as much a part of Portuguese rural life as a plate of salted cod.<sup>61</sup>

In a time of crisis, organizational forms change and revolutionary seeds are sown. The global financial crisis created a case of potentially insidious structural reform to Portugal’s system of local jurisdictions.

The state, the political unit to which people are most loyal today, also confers political legitimacy. For instance, France became the first western state to recognize

---

<sup>60</sup> Anthony Faiola and T. W. Farnam, “Bitcoin: Currency’s future, or another cyber-bubble?” *Washington Post* 5 Apr. 2013: A1.

<sup>61</sup> Faiola, “In crisis, Portugal tries to transform,” *Washington Post* 23 May 2012: A8.

Syria's newly formed opposition coalition as the sole legitimate representative of the Syrian people. The United States also granted legitimacy to the rebels, but left out the word "sole," saying that the group, which was formed in Qatar in November 2012, must first demonstrate its ability to represent Syrians inside the country.<sup>62</sup>

On the other hand, international institutions have begun to confer political legitimacy, to some degree. For instance, on November 29<sup>th</sup> 2012, the United Nations granted Palestine the status of "non-member observer state."<sup>63</sup> However, the vote was considered mostly symbolic because non-member observer states do not have authority in any of the bodies of the UN. Nonetheless, symbolism is a part of what drives loyalty and legitimacy, and this move was an unprecedented step by the UN. The move can possibly help grant Palestine increased power in international affairs. For example, "The Palestinians hope that access to UN bodies will bring new rights: A successful application for membership of the ICC could be used to accuse Israel of war crimes or make other legal claims against it."<sup>64</sup>

Thus, the status quo is granted a sort of self-strengthening character. As Vlahos explains, the rise of Genoa and Venice came about as "the power of the Catholic Church waned as conferrer of political legitimacy."<sup>65</sup> The city-state subsequently began to decide what political units were eligible to obtain legitimate social power. Today, the state is still the conferrer of political legitimacy, but that could change if the power of the state wanes in the manner that the power of the church waned during the enlightenment.

---

<sup>62</sup> Zeina Karam, "France, U.S. back Syrian coalition," *Washington Post* 14 Nov. 2012: A10.

<sup>63</sup> "Palestinians win upgraded status by wide margin," BBC News, online, Internet 12 Jan. 2013. Available: <http://www.bbc.co.uk/news/world-middle-east-20550864>

<sup>64</sup> "Palestinians win upgraded status by wide margin," BBC News, online, Internet 12 Jan. 2013. Available: <http://www.bbc.co.uk/news/world-middle-east-20550864>

<sup>65</sup> Vlahos, *Fighting Identity*, 94.

The entity that confers political legitimacy in a postmodern era will be something other than the state. The United Nations, a corporation, and an ideological grouping of like-minded people connected through the internet are all examples of what sort of entity could pull power from the state. Vlahos presents modern case studies of potentially postmodern political forms: Hezbollah, al Qaeda, gangs, the Muslim Brotherhood, or multi-national corporations.<sup>66</sup> As discussed above, these are potential seeds of revolutionary changes in patterns of loyalty.

### **Analysis of Anomalies**

The apparent anomalies presented at the opening of this chapter—the international acquisition and global logistics pooling of the F-35, the cohesion of the European union, and the introduction of Massive Open Online Courses—can be viewed through a modern lens or a postmodern lens.

### ***Modern***

Interestingly, Kenneth Waltz's 30 year-old realist international theory of politics provides a useful theoretical framework for understanding these apparent anomalies. According to Waltz, the anarchic international political structure—in which states act out of self-interest—leads states to behave in ways that seek their own preservation.<sup>67</sup> States use means that fall into one of two categories: internal or external efforts. Internal efforts include moves to increase economic capability or military strength, for example.<sup>68</sup>

---

<sup>66</sup> Vlahos, *Fighting Identity*, 97.

<sup>67</sup> Kenneth N. Waltz, *Theory of International Politics* (Boston, MA: McGraw Hill, 1979) 118.

<sup>68</sup> Waltz, *Theory of International Politics*, 118.

External efforts, on the other hand, involve enlarging alliances or shrinking opposing alliances.<sup>69</sup>

The international acquisition of the F-35 *Lightning II* performs both of the above functions for each participant state. Each participant aims to use the international acquisition to maximize benefit to his own state. In turn, the standardization and interoperability of the fleet of F-35s promises to enhance the effectiveness of alliances between any of the participants. Specifically, the Memorandum of Understanding between the United States and the eight partner nations regarding the production, sustainment, and follow-on development of the F-35 (hereinafter referred to as the JSF PSFD MOU) declares the participants' commonalities:

Having a common interest in defense;

Recognizing the benefits to be obtained from international cooperation regarding standardization, rationalization, and interoperability of military equipments...

Affirming their intent to use their best efforts to ensure that international cooperation under this PSFD MOU will maximize benefits (including financial) that will accrue to each of them;

Seeking to establish a robust vehicle of cooperation that will span the life cycle of the JSF Air System;

Recognizing the importance of technological and industrial cooperation to the national security of all Participants, and seeking to reduce barriers to that cooperation between the Participants; and

Recognizing that industrial participation will be an important parameter in the Participants' various national decision-making processes;<sup>70</sup>

The agreement underscores the self-interested nationalist intentions of the partnership.

The activities that take place within the program highlight the same state-serving intent. Individuals assigned to the program office look out first and foremost for the best

---

<sup>69</sup> Waltz, *Theory of International Politics*, 118.

<sup>70</sup> JSF PSFD MOU, 5.

interests of their state. For example, the Netherlands vehemently pursued the adoption of the Frangible Armor Piercing (FAP) round as a combat round in the F-35 gun system. The FAP round is a Dutch-designed round, the inclusion of which brings business to the Dutch economy. Likewise, Norwegian officials do their best to promote inclusion of the Joint Strike Missile, a product of the Norwegian company Kongsberg. In December 2012, Norway's Deputy Defense Minister Eirik Øvre Thorshaug met with Lockheed Martin officials to gain assurances that their missile would be integrated on the F-35. Mr. Thorshaug needed these extra assurances despite the fact that he had already retained a letter of assurance from US Secretary of Defense Leon Panetta.<sup>71</sup>

The cost-sharing structure outlined in the PSFD MOU is modern and state-centric in that it ensures that costs are partitioned among participants according to the number of aircraft their state has agreed to procure. There is no provision in the agreement to allow the formation of any cooperative blocks of participants to try to drive down the costs for the cooperative sub-group. The PSFD MOU states:

5.6 The Financial Costs for common production, sustainment, and follow-on development efforts will be shared among the Participants in accordance with the proportion of their individual JSF Air Vehicles to the total JSF Air Vehicles of all Participants participating in those efforts. This requirement is reflected in the Composite Share Ratio (CSR) formula,  $S=(A/B)C$ , where:

5.6.1 "S" represents the financial contribution by an individual Participant to the cooperative effort;

5.6.2 "A" represents the individual Participant's estimated JSF Air Vehicle procurement quantities. The values for "A" are identified in Annex A (Estimated JSF Air Vehicle Procurement Quantities), and will be adjusted by the JESB annually, if necessary, to reflect changes in the

---

<sup>71</sup> Dominic Perry, "Norway pushes for further assurances over JSM integration of F-35," *Flight International* 30 Nov. 2012, online, Internet 11 Jan. 2013. Available: <http://www.flightglobal.com/news/articles/norway-pushes-for-further-assurances-over-jsm-integration-on-f-35-379651/>

Participants' estimated JSF Air Vehicle procurement quantities, in accordance with paragraph 4.4.17 of Section IV (Management (Organization and Responsibility)). The impact of any such adjustments to the JSF Air Vehicle procurement quantities upon the financial contributions determined by this formula will be prospective only;

5.6.3 "B" represents the sum of the individual "A" values of the Participants participating in the cooperative effort; and

5.6.4 "C" represents the total Financial Costs of the cooperative effort.<sup>72</sup>

Despite such a clear demarcation of cost-sharing among participants, sometimes a single participant bears the whole cost of implementing a particular improvement that benefits more than just his state. For example, the cost of the initial drag chute modification to the conventional takeoff and landing (CTOL) variant was borne by the Norwegian Ministry of Defence. Norway's low rate initial production (LRIP) contract with Lockheed Martin specified the inclusion of the drag chute, a modification that will also benefit the Netherlands and Canada.

Although this might seem like a postmodern development that abrogates the state-centered nature of the global political structure, it is really more of a practical matter. The Norwegian government was the first partner state to sign a contract for an F-35 that would be based outside of the United States, and would thus require the drag chute modification to accommodate operations on Norway's small, icy runways. Norway was not acting altruistically, it was looking out for its own interests.

Waltz' theories on international politics are the central modern realist paradigm, and they explain F-35 procurement well. They also serve as a useful framework in which to understand the cohesion of the European Union. According to this view, those countries that offered their own economic power as a means to save the Union from

---

<sup>72</sup> JSF PSFD MOU, 35.

collapse did so in order to gain prestige. Hans Morgenthau defines prestige as a reputation for power that enables the achievement of political goals.<sup>73</sup> Prestige is a useful capability with which to garner social power, and states will seek to capture it when they can. Germany's actions to hold together the EU may serve to increase its prestige. In other words, the cohesion of the European Union is not about some higher ideal than state sovereignty, it is about individual states trying to gain prestige for themselves.

### ***Postmodern***

On the other hand, states within the European Union have deliberately handed power to EU authorities in ways that strongly undermine their sovereign power. For example, in the middle of October 2012, European state leaders agreed to find a way to institute a single regulator with the power over about six thousand banks in the seventeen-nation euro zone.<sup>74</sup> The final agreement was watered down from the initial proposal, but a profound step nonetheless: it charged a single supervisory mechanism (the European Central Bank) over about 180 major European banks. These banks control about ninety percent of the assets in the euro zone.<sup>75</sup> This action marked a significant reduction in the sovereign power that the national banks of Germany and France, for example, had held before the agreement. The single regulator will be able to implement monetary policy decisions based on what is best for the Euro, rather than what is best for the individual states that are affected.

Furthermore, the Nobel Prize committee enhanced the prestige of the European Union when it awarded the EU the 2012 Nobel Peace Prize. This action arguably

---

<sup>73</sup> Michael Sheehan, *The International Politics of Space* (London: Routledge, 2007) 20.

<sup>74</sup> Michael Birnbaum, "Europe agrees to banking regulator," *Washington Post* 19 Oct. 2012: A16.

<sup>75</sup> Howard Schneider, "Europe signs off on common oversight of banks," *Washington Post* 14 Dec. 2012: A25.

increased the social power of the EU as a political entity, and moved it one step closer to primacy as a political unit and conferrer of legitimacy. The committee stated the European Union “and its forerunners have for over six decades contributed to the advancement of peace and reconciliation, democracy and human rights in Europe.”<sup>76</sup>

However, the strength of this gesture is questionable. The day after the prize was awarded, the narrative surrounding the event in the American public media was that the Nobel Prize Committee was tarnishing its own prestige rather than enhancing the prestige of the recipient. Newspapers like *The Washington Post*, for example, questioned the value of the award that had been granted—to whom, exactly?—all 500 million members of the EU? Although it was not the first time an organization was awarded the prize (the United Nations won in 2001), reporters present at the ceremony noted audible gasps in reaction to the award announcement.<sup>77</sup>

Prior to that, the Nobel Prize Committee’s decision to award President Barack Obama the 2009 Peace Prize, after less than a year of his presidency, displayed the organization’s postmodernist vision. Ignoring the fundamental role of force and power as the underpinnings of relations among man, they stated, “Dialogue and negotiations are preferred as instruments for resolving even the most difficult international conflicts.”<sup>78</sup> Without a doubt, statesmen throughout history would not have to resort to force if their most difficult political differences could be resolved through dialogue. Their justification continued, “For 108 years, the Norwegian Nobel Committee has sought to stimulate

---

<sup>76</sup> “The Nobel Peace Prize 2012 - Press Release,” Nobelprize.org 29 Oct 2012, online, Internet. Available: [http://www.nobelprize.org/nobel\\_prizes/peace/laureates/2012/press.html](http://www.nobelprize.org/nobel_prizes/peace/laureates/2012/press.html)

<sup>77</sup> Olga Khazan, “E.U.’s Nobel Prize raises eyebrows,” *Washington Post* 12 Oct. 2012, online, Internet. Available: [http://www.washingtonpost.com/blogs/blogpost/post/eus-nobel-prize-raises-eyebrows/2012/10/12/4621a4fa-147e-11e2-bf18-a8a596df4bee\\_blog.html](http://www.washingtonpost.com/blogs/blogpost/post/eus-nobel-prize-raises-eyebrows/2012/10/12/4621a4fa-147e-11e2-bf18-a8a596df4bee_blog.html)

<sup>78</sup> “The Nobel Peace Prize 2009 - Press Release,” Nobelprize.org. 29 Oct. 2012, online, Internet. Available: [http://www.nobelprize.org/nobel\\_prizes/peace/laureates/2009/press.html](http://www.nobelprize.org/nobel_prizes/peace/laureates/2009/press.html)

precisely that international policy and those attitudes for which Obama is now the world's leading spokesman," and they "attached special importance to Obama's vision of and work for a world without nuclear weapons."<sup>79</sup> The committee overlooked the paradox that warfare in the age of nuclear weapons is far less bloody than it was before their introduction.

The Nobel awards to the EU and to President Obama reflect the postmodernist loyalties of the Norwegian Nobel Prize Committee, the independent body appointed by the Norwegian parliament at the request of Swede Alfred Nobel's last will and testament. However, scant evidence exists that public loyalties are shifting to something other than the state. Such shifts are not historically unprecedented, though they tend to stress and tear the existing political structure more than they create a larger, coherent whole.

For example, the Dreyfus Affair in France in the late 1800s created a great tension between loyalty to the French Army and loyalty to the more abstract ideal of justice in France. In this case, Alfred Dreyfus, a Jewish French officer during a time of burgeoning anti-semitism, had been framed and convicted as a spy by his Army superiors. Over the course of years, as evidence piled up that the Army had falsely convicted him, the majority of the public could not reconcile such evidence with their loyalty to the Army, which bore the symbols and rituals that drove their loyalty to the state itself. However, a few individuals who had unique insight to the truth in the case became determined to see loyalty to justice trump loyalty to the *Grande Armée*. In the literary climax of the affair, Emile Zola penned a scathing accusation of two French Ministers of War who had suppressed evidence of Dreyfus' innocence. Zola was tried for libel and eviscerated in the French press. The jury in the civil case convicted him by a count of 7 to 5,

---

<sup>79</sup> "The Nobel Peace Prize 2009 - Press Release"

remarkable for the fact that five jurors had the courage to vote for acquittal in such a social milieu. Ultimately, Zola's trial served as an inflection point in the discourse. Additional powerful voices in the conversation joined the side of truth and justice, and Dreyfus was brought out of his prison on Devil's Island for a retrial. Nearly five years after his first conviction, Dreyfus was again convicted of treason, this time sentenced to time already served (a decision that infuriated both sides). Seven years later his verdict was "broken" by the French Chamber; Dreyfus was restored to the Army, promoted to Major, and decorated with the Legion d'Honneur.<sup>80</sup>

The Dreyfus Affair serves as an example of competing loyalties between the state (and all of its symbolic grandeur) and a principle like justice, yet it never called into question the primacy of the French state. The affair grabbed the attention of the world, but it was seen as a French political problem to be handled within the French political system. It was always framed as a question about the state: could France tolerate such a miscarriage of justice? What was better for the French Army, a revision of the verdict and a clear national conscience or a continued cover-up that enabled people to believe that the "foreign" Jewish officer had betrayed France? Absent from the situation was any attempt to separate people's loyalty from the state itself. Today, the Nobel Peace Prize Committee is an institutional influence that attempts to frame events in a postmodern light.

Viewed from a postmodern perspective, the other anomaly presented at the opening of this chapter—the F-35 global sustainment model—helps establish Lockheed Martin as the purveyor of goods and services that attract loyalty to the company itself. Militaries that operate the F-35 *Lightning II* will require replacement parts and a global

---

<sup>80</sup> Tuchman, *Proud Tower*, 226.

logistics chain to supply them. Lockheed proposes to supplant the traditionally state-based logistics supply chain using their corporate-based model. The model, called Autonomic Logistics Global Sustainment, is defined as

The worldwide cooperative sustainment system for the JSF Air System consisting of a predominantly shared common logistics enterprise tailored to the Participants' needs. It consists of both Government and industry sustainment efforts, including interfaces, as determined by the Participants, between ALGS and Participants' national support capabilities outside of ALGS.<sup>81</sup>

ALGS aims to provide sustainment through a predominantly common solution, though it plans to make appropriate use of existing infrastructure to the extent that it is cost-effective and practicable.<sup>82</sup> In other words, Lockheed Martin is telling its customers that their national logistics infrastructure will be used when it is convenient, but ALGS will define an infrastructure for a new era.

Likewise, MOOCs are potentially more than just displays of self-interested organizational behavior. They may be deliberate attempts to alter patterns of loyalty that are dominated by states. If the marketplace of ideas can be thought to deal in a valuable currency, universities are the bankers in that system. By disseminating their preferred ideas worldwide, they can potentially influence culture and politics in ways that traditional state diplomacy can not.

## **Conclusion**

The dominant paradigm in global politics is a state-based anarchy. However, anomalies have emerged that call into question the strength of the modern, anarchic structure. The strength of the European Union during a global financial crisis, the birth

---

<sup>81</sup> JSF PSFD MOU, 6.

<sup>82</sup> JSF PSFD MOU, 18.

of a corporate-based global military logistics supply chain, and the advent of free international online higher education create fault lines in an otherwise firmly modern, anarchic global political structure. These anomalies are the seeds of revolutionary change.

On the other hand, as Mancur Olson showed in *The Logic of Collective Action*, the history of the social contract between groups of people reveals that large numbers of people do not band together to secure common interests. Small numbers do.<sup>83</sup> Additionally, the interests that band them together are minimal, so that the benefit to any individual is low compared with the costs of participation. This attribute of collective agreement suggests a high hurdle for postmodern, transnational governance.

Perhaps the obligation of the United States is to embrace postmodern forms of transnational governance, give up some sovereign rights, and assume greater obligations to humanity *writ large*. It can do so through existing international constructs such as the United Nations, or by embracing emerging structures such as the corporate model of global military sustainment. However, as a living entity striving to survive with a continuing advantage, it is unlikely that any state will defer to an international system when it is against its own particular interests to do so. Nonetheless, it is ultimately the responsibility of the powerful to establish system where chaos reigns. As the Dreyfus Affair demonstrates, it is a mark of transcendent wisdom for a state to recognize when a continued struggle to maximize its own advantage amidst such chaos undermines a universal principle like justice.

---

<sup>83</sup> Mancur Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups* (Cambridge: Harvard UP, 1965) 48.

## Chapter 4

### Civil-Military Relations

*Security against foreign danger is one of the primitive objects of civil society.*

*-- The Federalist Papers, No. 41*

*The senses of threat, vulnerability, and (in)security are socially constructed rather than objectively present or absent.*

*-- Barry Buzan, Security*

### Background

*To prepare for continuing conflict with state militaries, Ubermensch established a cadre of elite members to investigate the possibility of forming militias around the globe. Their charge was threefold: 1) to study war, 2) to select and educate the next generation of Ubermensch, and 3) drive the culture and identity of its members toward excellence. Ubermensch aimed to establish a warrior identity among its adherents.*

*As they demonstrated their effectiveness and capability in providing security for their members, demand for inclusion skyrocketed. Ubermensch leaders made a conscious decision to exclude people who could not make a significant contribution to the cause of excellence. Initially, people who had been denied membership in the online community thought it had been sporadic, or perhaps temporary exclusion. After all, many of them had neighbors down the street who had been granted membership and protection. However, over the course of just a few months, a pattern began to emerge.*

*Ubermensch had granted access and membership to people who had demonstrated a record of contribution to their current society. Athletic coaches,*

*organizational leaders, managers, volunteers, and fundraisers found easy access to the community. Welfare recipients, drug abusers, and people with a criminal record were routinely denied. All of the data to determine contributor/abuser status had been available online for decades. Programming experts at Ubermensch had honed their algorithm to canvas social networking sites, criminal records, and even a few genetic fingerprints to determine whether the applicant was a contributor or not. It was that simple. Ubermensch did not have any appeals process or adjudication of decisions, although they did update the algorithm occasionally. People who wanted access to that society had to take action to tip the online record in their favor.*

*On the other hand, E-just accepted any and all applicants. The more capable and financially secure individuals who joined paid more for E-just services, but reaped the benefits of social approbation. The reason for the social sanction was that E-just had managed to sell a narrative early in its development that its members were looking out for other people. They portrayed the Ubermensch model as a selfish ideal that rewarded “previous winners in the genetic lottery.”*

*E-just relied on its vast numbers of “white hat” hackers to provide security for its members and to mentor the next generation of white hats. The most capable members of E-just sought inclusion in the prestigious Circle of Justice, a growing group of people who had contributed significantly to the society. Like the Ubermensch model, a computer algorithm determined membership in the Circle of Justice. Active, contributing members of the White Hat Society—those who dedicated themselves to issues of security—were almost always accepted into the Circle of Justice within one year.*

*The missions that qualified as security-related for E-just were vast and varied. The people who performed them included academics who contributed to the understanding of conflict and warfare, hackers who developed viruses and cyberattacks, and people who developed the physical infrastructure for E-just as well: truckers who moved servers, construction firms that built and reinforced the buildings that housed the servers. Ubervensch, on the other hand, focused their elite militia cadre on violence. Their goal was to maximize their potential for violence across all domains. However, they employed this violence with exceptional rarity.*

*Meanwhile, some of the programs the United States government promulgated decades ago made a substantial difference in the decision people were now making when they decided to join E-just or Ubervensch. Specifically, the Post-9/11 GI Bill—which paid for the education of military personnel and their children—started to nurture a culture of service and responsibility. Although most people now obtained their undergraduate degree online, graduate degrees were now the minimum standard for salaried work. University tuition continued to rise ten times faster than inflation. Due to the cost of tuition, coupled with the cost of mandatory health insurance for a full-time student, many people viewed a commitment to serve in the armed forces as the only viable road to an advanced academic degree. Thus, the student body physically attending classes together was an intellectually healthy blend of wealthy individuals and former service members from all layers of society.*

Historians and sociologists generally agree that society and war are inextricably linked.<sup>1</sup> Furthermore, it is rarely disputed that a state's military forces shape its political

---

<sup>1</sup>Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, Mass: Belknap Press, 1957) 1.

structures and the institutions of its government.<sup>2</sup> These in turn shape the culture of the population. Two important factors about the military that help shape society are, stated simply: what the military is, and what the military does. Its people, organizational structure, norms and customs define what the military is. Its roles and missions describe what the military does. The military today is changing in both of these dimensions.

The sections immediately below detail some of these changes and the way commentators have chosen to characterize them. Historian and sociologist Charles Moskos, for example, sees in these changing missions and shifting makeup the onset of a postmodern military. However, two significant questions remain. First, which precedes the other: societal change or military change? Although—like the chicken-or-the-egg problem—this question cannot be decided definitively, senior leaders' beliefs on the answer to this question will influence their decisions, which will in turn have an impact on society. Second, what constitutes postmodern change in terms of military organization and missions?

The remainder of this chapter is divided into three main sections. In the rest of this background section I sample some of the contemporary discourse about changes in the military, and then present an array of theoretical constructs with which to assess these changes. In the second section I describe some of the decision points at which civilian and military leaders can shift the character of society in the long term. In the third section I attempt to answer the question about what constitutes postmodern change; I establish the characteristics of the civil-military relationship that draw the line between modern and postmodern.

---

<sup>2</sup> Everett Dolman, *The Warrior State: How Military Organization Structures Politics* (New York: Palgrave MacMillan, 2004) 3.

### *Changes in the Military Organization*

The character, structure, and makeup of the military institution are changing. Some of these changes are external changes, as they occur across the civil-military divide. For example, civilian and military spheres of operation are blending and the lines between them are becoming blurred. Other changes occur within the military organization. For instance, differences based on branch of service, rank, and combat versus support roles are diminishing.<sup>3</sup> Furthermore, the role of the reserves has changed significantly. For example, within the Air Force reserve, units and personnel have become much more integrated with the regular Air Force.<sup>4</sup> Military demographics have also changed significantly over the last century.

External changes in the military organization—those that cross the civil-military divide—include alterations in the relationship between the military and the media, increased civilian employment within military organizations, novel organizational constructs within the United States Combatant Commands, and relatively new civil-military alliance structures.

Relations between the military and the media have changed appreciably. Through World War II, the media were essentially incorporated into the armed forces. They were subject to censorship, had formal status in the military, and were issued military uniforms.<sup>5</sup> The media incorporation model gave way to media manipulation in which the defense establishment controlled the media through the use of press pools that restricted

---

<sup>3</sup> Charles Moskos, John Williams and David Segal, *The Postmodern Military: Armed Forces after the Cold War* (New York: Oxford UP, 2000) 2.

<sup>4</sup> Moskos, *Postmodern Military*, 19.

<sup>5</sup> Moskos, *Postmodern Military*, 20.

journalist's access to military personnel.<sup>6</sup> Recent events exhibit an evolution in military-media relations that Moskos describes as courtship, in which the armed services court media coverage, as evidenced by the embedded journalism model established in 2003.

The changes in media relations with the military increase the blending of military and civilian spheres. For example, the decision to embed journalists in combat units in the 2003 invasion of Iraq blended the civilian sphere of the traditional press with the military sphere. As was the case for British embedded journalists in the Falklands War in 1982, the journalists became dependent on the military for food, shelter, and security. This dependency created a sense of identification between journalists and soldiers that, some analysts argue, skewed the tone of reporting to a more favorable one.<sup>7</sup>

More recently, soldiers themselves have become journalists of sorts, posting web logs of their combat activity to social networking sites such as Facebook and Twitter. For example, reservist Jean Paul Borda created a web site called milblogging.com that indexes more than 2,400 military-related blogs.<sup>8</sup> In one contentious example of soldier journalism, Lieutenant Matt Gallagher's popular war blog *Kaboom* was taken offline in 2008 after he satirized a commanding officer's attempts to pressure him into taking an unwanted promotion.<sup>9</sup> Clearly, the rise of electronic media and the Internet has blended the military sphere with the traditionally civilian.

Another facet of external change concerns the involvement of civilian employees in military affairs. For example, US warships today require civilian technicians to

---

<sup>6</sup> Moskos, *Postmodern Military*, 21.

<sup>7</sup> Michael Pfau, et al., "Embedding Journalists in Military Combat Units: Impact on Newspaper Story Frames and Tone," *Journalism & Mass Communication Quarterly* 81.1 (2004): 74.

<sup>8</sup> James Dao, "Leashing the Blogs of War," *Blogs.nytimes.com* 8 Sep. 2009 online, Internet 17 Feb. 2010. Available: <http://atwar.blogs.nytimes.com/2009/09/08/leashing-the-blogs-of-war/>

<sup>9</sup> Dao, "Leashing the Blogs of War"

maintain their weapons systems. In another example of the increasingly important role civilians play in the military, more than ten thousand emergency essential civilians served the US military in Saudi Arabia in Operation Desert Storm. Strikingly, contractors made up fifty three percent of the Department of Defense workforce in Iraq and Afghanistan in 2009.<sup>10</sup>

Janowitz notes that the growth in the civilian character of the military establishment, coupled with the proliferation of complex technology leads to a greater number of civilian technicians to support the force.<sup>11</sup> Furthermore, the military focus on deterrence requires professional soldiers to concern themselves with broad political social and economic policies. Additionally, military commanders are charged with directing an organization whose personnel have skills that are increasingly transferable to civilian employment.<sup>12</sup> Adams pointed out that when the digitized 4th Infantry Division deployed to Iraq during the Gulf War, it carried a staff of sixty civilian contractors to maintain its command and control systems.<sup>13</sup> No military personnel were trained for the job. These contractors had effectively been training for their wartime mission in the course of their civilian jobs at home. Janowitz contends that this “civilianization” trend necessitates modifications to the military, including a democratization of the officer recruitment base and a shift in the basis of organizational authority toward initiative and away from rigidity and authoritarianism.<sup>14</sup>

---

<sup>10</sup> Moshe Schwartz, *Department of Defense Contractors in Iraq and Afghanistan: Background and Analysis* (Washington, DC: Congressional Research Service, 2009) 1.

<sup>11</sup> Morris Janowitz, *The Professional Soldier: A Social and Political Portrait* (Glencoe, Ill.: Free Press, 1960) 32.

<sup>12</sup> Janowitz, *Professional Soldier*, 64.

<sup>13</sup> Thomas Adams, *The Army After Next: The First Postindustrial Army* (Westport, CT: Praeger Security International, 2006) 238.

<sup>14</sup> Morris Janowitz, *On Social Organization and Social Control*. (Chicago: The U of Chicago P, 1991) 104.

The newest geographic combatant command, AFRICOM, provides another example of the increased blending between military and civilian spheres. Structurally, the Unified Combatant Command created in 2007 differs from other combatant commands in that it employs a civilian Deputy Commander for Civil-Military Activities. Furthermore, the command explicitly acknowledges its blended character in public pronouncements and publications. For example—in a section subtitled *A Different Kind of Command*—its public website notes:

AFRICOM reflects a much more integrated staff structure, one that includes significant management and staff representation by the Department of State, US Agency for International Development (USAID), and other US government agencies involved in Africa.<sup>15</sup>

Likewise, the creation of a sub-unified cyber command, USCYBERCOM, brings to light several issues that blur the line between traditional military and civilian activities. Susan Brenner points out that the increase in national security threats through cyberspace—cyberthreats—contribute to an erosion of the distinction between combatants and non-combatants.<sup>16</sup> For example, she notes the traditional distinction between threats of war and criminal threats is based on territoriality—the law classifies threats from outside of territorial political boundaries as potential threats of war and threats within a territorial political boundary as criminal threats. In the United States, the Posse Comitatus Act of 1878 separates military activities from law enforcement activities, thus preventing armed forces personnel from responding to criminal threats. However, cyberthreats present a unique problem in that their origin is not readily apparent. Therefore, a determination of the nature of the threat—war or crime—and the

---

<sup>15</sup> “United States Africa Command,” *Africom.mil*, online, Internet 17 Feb. 2010. Available: <http://www.africom.mil/holmes.asp>

<sup>16</sup> Susan W. Brenner, *Cyberthreats: The Emerging Fault Lines of the Nation State* (Oxford: Oxford UP, 2009) 197.

appropriate responding party—armed forces personnel or civilian law enforcement—is obfuscated. The state must respond to some cyberthreats quickly, and the organization that responds to the threat will not necessarily know whether it is acting as a combatant or non-combatant law enforcement agent. Thus, the line differentiating combatants from non-combatants blurs in the approach to postmodern conflict.

The North Atlantic Treaty Organization (NATO) also blends military and civilian spheres. NATO is comprised of civilian and military components that interact to reach decisions and take action. The civilian portion includes a permanent representative to the North Atlantic Council, the principal political decision-making body in NATO. A Military Committee of senior officers provides military advice to the civilian bodies within NATO. Additionally, NATO includes standing joint force commands and multiple Combined Joint Task Forces.

The structure within NATO blends the civilian and military spheres of policy. For example, during the first week of Operation Allied Force—the NATO offensive against Bosnia in 1999—military leaders were tasked to “demonstrate resolve” without any associated political strategy or specific objectives. General Rupert Smith, Deputy Supreme Allied Commander in Europe during the operation, summed up the nature of the contemporary military-political blend by stating, “it is unreasonable for the military to ask for precise political strategies and end states from politicians.”<sup>17</sup> Smith acknowledged the increased blending between traditional military and civilian spheres can leave grand-strategy in the hands of the military.

---

<sup>17</sup> Dag Henrikson, *NATO's Gamble: Combining Diplomacy and Airpower in the Kosovo Crisis 1998-1999* (Annapolis: Naval Institute Press, 2007) 198.

Internal changes in the military organization include demographic changes and—similar to external changes—a blurred distinction between combat and support personnel and roles. Demographic changes of note involve the proportion and roles of female service members, married personnel, and openly gay troops in the military. The altered incidence of allowable conscientious objection and the character of the dominant military professional highlight the blurred distinction between combat and support roles.

The role of women in the military has changed significantly. Specifically, women were largely excluded from military service in the mass armies of the early twentieth century. Those women who did serve were relegated to a separate corps, such as the Women's Army Corps (WAC), the Women Accepted for Volunteer Emergency Service (WAVES), and the Womens Air Service Pilots (WASPS). Women were formally integrated into support roles in the 1970s, and admitted to military service academies in 1976, though they were still largely excluded from combat or high risk service.<sup>18</sup> Recent events have ushered women into combat roles including—as of February 23<sup>rd</sup>, 2010—the lifting of the ban on female service aboard submarines.<sup>19</sup> Just under three years after that policy change, Defense Secretary Leon Panetta completely lifted the ban on women serving in combat roles.<sup>20</sup>

The proportion of married service members and the role of military spouses has also changed. For example, fewer than one in ten draftees were married men in the 1950s, but the advent of the all volunteer force reversed the draft pattern such that

---

<sup>18</sup> Moskos, *Postmodern Military*, 22.

<sup>19</sup> Phil Stewart and Susan Cornwell, "Pentagon OKs Lifting Ban on Women in Submarines," *Reuters* 23 Feb. 2010.

<sup>20</sup> Julian E. Barnes and Dion Nissenbaum, "Combat Ban for Women to End," *Wall Street Journal* 24 Jan. 2013: A1.

military personnel are more likely to be married than their civilian counterparts.<sup>21</sup>

Likewise, the role of the military spouse has evolved over time. In the mid-1900s, the military wife was expected to take part in numerous social functions and “volunteer” activities. Today, a large proportion of military spouses eschew such endeavors or are employed outside of the home.<sup>22</sup>

Another military demographic change involves homosexuals in the armed forces. The United States military used to strictly enforce a prohibition against homosexuality, incarcerating offenders during wartime and discharging them dishonorably during peacetime.<sup>23</sup> The severity of the punishment diminished in the late 1900s, often resulting in medical discharges for homosexual service men and women. The “don’t ask, don’t tell” policy established in 1994 forbade the establishment from inquiring into a member’s sexual orientation. More recently, on 22 July 2011 Congress repealed the policy and passed a law that barred discrimination against service members based on sexual orientation.<sup>24</sup> This shift towards greater acceptance of homosexuals in the military parallels the trend of acceptance among the broader society as a whole. Specifically, prior to 1974, the American Psychiatric Association considered homosexuality a pathology but revised its definition to remove homosexuality as a disease in the seventh printing of the Diagnostic and Statistical Manual of Mental Disorders, version II.<sup>25</sup>

---

<sup>21</sup> Moskos, *Postmodern Military*, 23.

<sup>22</sup> Moskos, *Postmodern Military*, 23.

<sup>23</sup> Moskos, *Postmodern Military*, 24.

<sup>24</sup> Leo Shane, “Repeal ends decades-long fight against DADT” *Stars and Stripes* 20 Sep. 2011, online, Internet. Available: <http://www.stripes.com/news/repeal-ends-decades-long-fight-against-dadt-1.155670>

<sup>25</sup> R. Bayer, *Homosexuality and American psychiatry: The politics of diagnosis*, 2nd Ed. (Princeton: Princeton UP, 1987) 123.

The dominant military professional has evolved from combat leader, to technician-manager,<sup>26</sup> to soldier-statesman or soldier-scholar. The 1990s brought the rise of more scholarly military elites, such as General Wesley Clark, whose diplomatic skill and scholarly demeanor were lauded as positive attributes in his selection as supreme commander of NATO.<sup>27</sup> Further examples of the men who epitomize the dominant professional in recent times include General Colin Powell and—before his military retirement—General David Petraeus.

Another internal change is that the incidence of allowable conscientious objection has increased, and the reasons for objection have become more secularized. For instance, the nineteenth century American military often allowed conscientious objection from members of established pacifist churches such as Mennonites, Quakers, and Seventh Day Adventists. If such objectors were not allowed to avoid service altogether, they were often given the option of serving in a non-combat military role or serving time in prison. The military of the twentieth century excused conscientious objectors from a broader religious base including Roman Catholics and mainline Protestants. Today, religion is no longer the defining characteristic of conscientious objection, as some individuals object to military service on secular humanitarian motives.<sup>28</sup>

All of these organizational changes—internal and external to the military itself—portend a similar shift within society. As changes occur to what the military is, changes are also taking place to what the military does.

---

<sup>26</sup> Janowitz, *Professional Soldier*, 1.

<sup>27</sup> Moskos, *Postmodern Military*, 19.

<sup>28</sup> Moskos, *Postmodern Military*, 25.

### ***Changing Military Missions***

The military is organized, trained, and equipped to counteract perceived threats. Such threats change over time. For example, the primary perceived threat during the Napoleonic era was an enemy invasion of a nation or its allies. With the advent of nuclear weapons, the primary perceived threat changed to intercontinental nuclear war. At least a part of the threat today is ethnic violence and terrorism.<sup>29</sup>

Linked closely to the perceived threat is the major mission definition. The United States has variably defined the major mission for its military over the years. From about 1900 to the end of World War II, the mission was primarily homeland defense. Beginning with the Cold War, the US military began to orient toward the major mission of supporting alliances such as the North Atlantic Treaty Organization.

Accordingly, the roles and missions of militaries have changed over centuries. In his conceptualization of a postmodern military, sociologist Charles Moskos describes changes to the primary use of the military from fighting wars to performing missions other than major combat operations. To buttress his assertion that the primary use of the military is shifting from major combat, Moskos lists fifty four actions of western armed forces from the end of the Gulf War to the middle of 1999, of which thirty one involve some form of humanitarian aid such as evacuation, hurricane relief, famine relief, and rescue.<sup>30</sup> Of the remaining twenty-three, only seven approach the characterization of major combat operations; those are listed as air strikes or bombing. The sixteen other operations comprise surveillance, monitoring, or observation missions. Even in times of actual warfare, such as the two wars the United States has waged concurrently over the

---

<sup>29</sup> Moskos, *Postmodern Military*, 15.

<sup>30</sup> Moskos, *Postmodern Military*, 282.

past ten years, major combat operations comprised only twenty percent of the 120-month total involvement. The remaining ninety eight months of action can be characterized as counterinsurgency, nation building, security operations, and peacekeeping. These observations highlight an altered use of the armed forces.

The introduction of new terms in the Pentagon lexicon—such as military operations other than war (MOOTW), sustainment and stability operations, and low intensity conflict—provide further evidence for the increasing importance of peacekeeping and humanitarian missions.<sup>31</sup> Richard Shultz describes the trend toward operations other than major combat as a trend toward “fourth-generation warfare,” characterized by a lack of major combat operations.<sup>32</sup>

More than just a new lexicon, parts of the strategic conversation are changing as well. For instance, the United States’ 2007 maritime strategy—the first maritime strategy published in more than twenty years—also underscores the shift in the role of the military from major combat operations to nation-building, peacekeeping, and humanitarian support. It states that “preventing wars is as important as winning wars.” The novel focus of the strategy includes enhancing the ability to “positively influence events and ease the impact of [natural] disasters.”<sup>33</sup>

Moskos also argues that the military is used now more often than ever before in internationally authorized or legitimized missions.<sup>34</sup> Operation Allied Force provides an example of the international legitimization of armed force to solve humanitarian

---

<sup>31</sup> Moskos, *Postmodern Military*, 17.

<sup>32</sup> Richard H. Shultz, Douglas Farah and Itamara V. Lochard, “Armed Groups: A Tier-One Security Priority,” *Institute for National Security Studies Occasional Paper* 57 (2004): 37.

<sup>33</sup> US Navy, *A Cooperative Strategy for 21<sup>st</sup> Century Seapower*. 17Oct. 2007, online, Internet 24 Jan. 2010. Available: <http://www.navy.mil/maritime/Maritimestrategy.pdf>

<sup>34</sup> Moskos, *Postmodern Military*, 2.

problems rather than protect against invasion. The operation was a NATO response to violence by the Federal Republic of Yugoslavia (FRY) against ethnic Albanians in Kosovo. The operation sought full compliance with United Nations Security Council Resolution 1199, including a verifiable cessation of FRY military action in Kosovo.<sup>35</sup> This single operation underscores two aspects of changing military missions: the ascendancy of the humanitarian support mission, and the increasing importance of international legitimization of the use of force.

The texture and substance of the United States military's mission set has changed to include a wider swath of missions and to rely on some degree of international legitimization. This changing mission set is both a product and a determinant of the society in which the military is situated. The mission set will influence society, and society will alter the missions upon which it chooses to embark. The catalog of changes to what the military is and what it does demands an analysis grounded in theory. In the following section I review a few theoretical constructs, traditional and postmodern, that attempt to explain civil-military relations.

### ***Civil-military Relations Theory***

Numerous theories exist to explain the relationship between the military and the society in which it resides. These theories can be divided into two categories for the purposes of this analysis: traditional and postmodern. The traditional theories focus on threats as objective realities, rational agents in a principle-agent relationship, and professional soldiers. These are the theories of Huntington, Cohen, Feaver, and Janowitz. The postmodern theories—headlined by Buzan, Waeber and Vlahos—highlight the

---

<sup>35</sup> Henrikson, *NATO's Gamble*, 130.

importance of discourse and identity in grouping people into societies and generating perceived threats. The postmodern theorists recognize that to provide security against a foreign danger—Hamilton’s “primitive object of civil society”—society must first define foreign, then define danger, and then invest in a security apparatus to meet the threat.

Huntington’s 1957 book *The Soldier and the State* is the bedrock of civil-military relations theory. In his book he describes two forces that shape the military. The first is created by threats, which he calls the functional imperative. The second is formed by the dominant social forces in society, and he terms that the societal imperative.

Huntington’s objective civilian control theory of civil-military relations explains that an autonomous realm of military action—an operational level of war completely disjoined from the strategic level of policy—strengthens civilian objective control over the military.<sup>36</sup> That is, professional soldiers should be handed clear political objectives and allowed to conduct military operations free of civilian influence. In actual practice, however, war and politics are inextricably linked; policy necessarily treads on the conduct of war and vice versa. Elliot Cohen corroborates this practical observation, noting that Huntington’s theory rarely holds in time of war.

Whereas Huntington’s theory was devised to explain civil-military relationships during peacetime in a liberal society, Elliott Cohen’s *Supreme Command* examined the relationship during a time of war. Within such a frame of reference, Cohen discusses the unequal dialogue between civilian and military leaders that he views as a requisite for political success in war. He writes less about the relationship between a society and its military, and does not focus on the factors that shape a military force. Instead, he writes

---

<sup>36</sup> Huntington, *Soldier and the State*, viii.

about the employment of such a force under the command of a determined, courageous leader.

Feaver, on the other hand, focuses on the relationship between the society and the military. He opened his book, *Armed Servants*, with the assertion that Huntington's model of civil-military relations does not adequately explain the civil-military relationship outcome of the Cold War. During that conflict, society retained its liberal character while a massive, conservative military force continued to grow. His framework involves viewing the military as an agent and the civilian leadership as the principal in the traditional principal-agent economic sense.

The economic costs and risks inherent in Feaver's framework derive from the strategic and hierarchical relationship between civilians and the military in a democratic society. Namely, "Civilians invent the military, contracting with it to protect society from enemies, but then civilians find it necessary to assure themselves that the military will behave as intended."<sup>37</sup> The relationship is strategic because civilian choices depend upon their expectations about military behavior. It is hierarchical in a democratic society because civilians enjoy a legitimate position of superiority over the military. The costs in this relationship are the costs of monitoring, punishing, and rewarding behavior. The risks involve the potential for unmonitored behavior to proceed in an undesired direction.

Feaver applied the principal-agent framework to the Cold War puzzle to arrive at the following explanation. During the Cold War, civilian costs of monitoring the military were low and military expectations of punishment for shirking duty were high. This

---

<sup>37</sup>Peter Feaver, *Armed Servants: Agency, Oversight, and Civil-Military Relations* (Cambridge, Mass: Harvard UP, 2003) 54.

resulted in a military that performed its security function in a somewhat separate cultural sphere from civil society, and so the two developed independently. Therefore, society retained its liberal character despite the growth of a large, conservative military force. Interestingly, after presenting the principal-agent framework to explain the Cold War civil-military relationship puzzle, Feaver's prescriptive use of the theory focuses narrowly on "use of force" decisions. Instead of describing the interaction between society and the military, he presents five case studies—the Gulf War, Haiti, Somalia, Bosnia, and Kosovo—that highlight the interaction between civilian leadership and senior military commanders, along the lines of Cohen's investigation.

Importantly, Feaver chooses to buck the trend in political science that focuses on nonmaterial determinants of behavior—postmodern determinants like identity, norms, beliefs, and ideas—and instead to highlight the importance of material determinants of behavior like economic costs and risks. He calls this the rationalist method, and he contrasts it with the bounded rationality approach—such as the "logic of appropriateness" model developed in March 1978—and the "ritualized behavior" approach developed by Scott and Meyer in 1983.<sup>38</sup>

Janowitz is a transitional character between traditional and postmodern theorists on civil-military relations. His book *The Professional Soldier: A Social and Political Portrait* contains aspects relatable to Huntington, Feaver, and Cohen, as well as a bridge to the postmodern theorists described below. First, similar to Huntington, Janowitz notices changes in the big-picture relationship between society and the military. He noted that an officer corps that was, prior to 1960, largely isolated from society had

---

<sup>38</sup> John W. Meyer and W. Richard Scott, *Organizational Environments: Ritual and Rationality* (Beverly Hills, CA: Sage, 1983) 129.

shifted towards a profession with elaborate contact with civil society.<sup>39</sup> Second, where he discusses the relationship between civilian and military leadership, he notes that technical-minded officers are a hazard to the conduct of foreign policy because they lose sight of the forest (the political object) for the trees (the application of specific technologies). However, even the more political-minded officers require more direction than civilians give them.<sup>40</sup> Third, his book contains a bridge to the concept of postmodernism as discourse when he notes how people with different ideologies had different conceptions of Soviet intentions during the Cold War. Necessarily, those differing conceptions will drive differing perceptions of the same reality. To the postmodernist, these differing conceptions create reality itself.

In a sharp and useful departure from Huntington, political scientists Buzan and Waever challenge the notion of a concrete, observable foreign threat. They contend that the functional imperative—the threat that Huntington treats as an objective reality—can be securitized through discourse. In this securitization process, people participate in the grouping function of politics to first define what is foreign, and then to define the threat according to that frame of reference. They note that when securitization is focused on external threats—as in the Huntington formulation—it is about capability; however, there is no correlation between external military capability and its securitization.<sup>41</sup> For example, democratic states don't fear each other's capabilities. American security discourse almost never revolves around the status of the nearly 4000 mile-long land border with Canada. When the border becomes a topic of conversation it usually centers

---

<sup>39</sup> Janowitz, *Professional Soldier*, 176.

<sup>40</sup> Janowitz, *Professional Soldier*, 342.

<sup>41</sup> Barry Buzan, Ole Waever, and Jaap de Wilde, *Security: A New Framework for Analysis* (Boulder, CO: Lynne Rienner Publishers, 1998) 51.

on racial factors as determinants of what is foreign, not on political states. Buzan and Waever state plainly their central disagreement with Huntington's theory: "the senses of threat, vulnerability, and (in)security are socially constructed rather than objectively present or absent."<sup>42</sup> To Buzan and Waever, the speech-acts of securitization are the primary elements in the civil-military discourse.

Vlahos reifies identity as the primary element in the civil-military discourse. He describes a narrative in which the rise of a military identity within a culture portends that culture's downfall. His template for the fall of leaders is as follows: state revenue goes more and more to the military; military subcultures evolve as a privileged powerful set of institutions; this distinct military identity creates a constituency; military subcultures become central to state identity and take over the sacred narrative.<sup>43</sup> He offers some prescriptions for the United States to prevent such a story from continuing to unfold: quit counterinsurgency operations, implement national service to end the divorce between society and its "intercessor nation", and enter into a dialogue with emerging identity groups instead of trying to kill them all.<sup>44</sup> Overall, Vlahos' theory incorporates both strands of civil-military relations theory: the relationship between society and the military, and the relationship between senior civilian and military decision-makers.

With these multiple, competing theoretical frameworks in mind, I turn my focus to various military structures and missions and their bearing on civil-military discourse.

---

<sup>42</sup> Buzan, *Security*, 57.

<sup>43</sup> Michael Vlahos, *Fighting Identity: Sacred War and World Change* (Westport, CT: Praeger Security International, 2009) 152.

<sup>44</sup> Vlahos, *Fighting Identity*, 209.

## Military Organization

Numerous differences exist between the fabric of the US military and the civil society in which it resides. Notably, the services have developed a highly effective welfare state with family, medical, and social services unparalleled in most civilian communities.<sup>45</sup> This element of the American military culture contrasts sharply with the traditional ethic of Western capitalism—Adam Smith’s concept of the invisible hand—in which the system harnesses self-interestedness for the collective good of society. Specifically, the United States military takes care of its members according to their needs. Members with families are paid more than single members, or otherwise provided with larger living accommodations on base. Members and their dependents who fall ill or are injured are treated at no cost to the member.

The American military also exhibits an *esprit de corps* far different from civil society. The military’s organizational structures, norms, and values counterbalance traditional American values of self-sufficiency and self-interestedness. As Fallows describes, “The military is the largest institution in America that has a franchise to think about the success of people working in groups. An individual soldier’s welfare matters, of course, but chiefly because it allows his platoon or company or brigade to cohere.”<sup>46</sup> He continues, “the US military is about the only public institution that is comfortable saying openly that individual rights take second place to the welfare of the whole.”<sup>47</sup> In every other institution, interest groups fight to maintain autonomy and power. For instance, the Secretary of Education and the fifty superintendents of state school systems preside over district-by-district rivalries that make it impossible to send help to the

---

<sup>45</sup> Janowitz, *Professional Soldier*, xxxiii.

<sup>46</sup> James Fallows, “Military Efficiency” *The Atlantic*, Aug. 1991: 18.

<sup>47</sup> Fallows, “Military Efficiency,” 20.

neediest schools. Fallows contrasts that structural rivalry with the military commander, who can tell units to sacrifice for the greater good.

However, this differentiation between the military and the rest of society is not all positive, and it is not without risk. Dolman notes that only a few from our society actually fight, which distances the military from the rest of society. Combatants are deployed and become physically distant from their civil counterparts for many years of their careers. This generates the remote danger of the military's separation from society leading to a feeling of elitism within the military, and (in the extreme) a populist call in a time of economic trouble to let the military take over the function of governing.<sup>48</sup>

Military structures themselves influence the direction in which societal character develops. Dolman describes numerous principles that influence the liberalization of political development, one of which is the organizational construct upon which the military is built. For example, citizen militias lead to a proliferation of more liberal democratic institutions than would arise under the reliance upon mercenaries.<sup>49</sup> Additionally, more training discipline and combined operations are more likely to foster democratic values and institutions because subordination to the will of others is an integral part of the democratic state.<sup>50</sup> In a democratic society civilian leaders can implement a particular structure with the stated intent of solving a problem, but the structures they create will drive society in ways that fall outside of the frame of reference of that one problem. For example, the decision to implement a draft for military service may solve a shortfall in troop levels in a given conflict, but it will have much larger ramifications for the character of society as a whole.

---

<sup>48</sup> Dolman, *Warrior State*, 173.

<sup>49</sup> Dolman, *Warrior State*, 32.

<sup>50</sup> Dolman, *Warrior State*, 38.

This relationship between military structures and society offers many decision points at which leaders can—wittingly or not—alter the character of the society they serve. Some of these include decisions regarding standing armies versus citizen militias, drafted versus all-volunteer forces, what subset of society to allow into military service, and how to educate that subset of the population. The way decision-makers view civil-military relations in general—whether from an objective traditional theory or a discourse-based postmodernist theory—will influence their direction.

Despite the distinctive aspects of the military within American society, the two realms are not completely dislocated. This statement is corroborated by theorists from Huntington to Vlahos. In turn, the types of decisions that shape the military will shape society broadly, even if they are securitized and framed narrowly. For instance, even if policy makers think they are only deciding whether a reserve unit stays in their district, they will ultimately determine who should serve and how they should serve. The question about who should serve is answered in the method of consignment (draft or volunteer) and the education of the military. How they should serve is determined, in part, by the structure of the service in terms of armies, reserves, and militias.

### ***How Should The Military Serve? Armies, Militias, and Mercenaries***

Victor Davis Hansen contends that western militaries are so adept at warfare because of the way their society is organized. Specifically, he highlights Brasidas' argument that the reason Spartans so often triumph is that they come from a society in

which the many rule the few, not vice versa.<sup>51</sup> The government of the United States of America, of course, was built upon this principle of governance.

The American public's attitude toward the military organization has changed over time. Weigley's *American Way of War* highlighted colonial America's suspicion of standing armies.<sup>52</sup> During World War II, the prevailing attitude was supportive of a standing force. This support waned during the 1970s, when the popular media often depicted military personnel as buffoonish characters. Public support for servicemen and women during the Vietnam War was generally dismal.<sup>53</sup> Subsequently, the end of the draft made service seem a more distant possibility to the general populace.<sup>54</sup> In turn, military operations since the end of the draft attract less attention than they otherwise would. Today, the public attitude is sometimes indifferent, particularly during peacekeeping and humanitarian operations such as Operation Restore Hope in Somalia in 1992-3, or Operation Support Hope in Rwanda, Zaire, and Uganda in 1994. It is unclear whether this rolling tide of public opinion, military organization, and changing missions is based on objective, measureable threats or subjective, story-based discourse.

Regardless of the way they frame these problem sets of military organization, civilian leaders' decisions shape the dominant public attitude toward the military. They do so by manipulating force structure, initiating a draft, or shifting the balance of standing forces toward guard and reserves. Dolman refers to these issues as part of the age-old debate about whether to rely on professional soldiers or citizen militias.<sup>55</sup> He

---

<sup>51</sup> Victor Davis Hanson, *Carnage and Culture: Landmark Battles in the Rise of Western Power* (New York: Anchor Books, 2001) 6.

<sup>52</sup> Russell Weigley, *The American Way of War: A History of United States Military Strategy and Policy*. (New York: Macmillan Publishing Company, Inc., 1973) 41.

<sup>53</sup> Moskos, *Postmodern Military*, 20.

<sup>54</sup> Moskos, *Postmodern Military*, 20.

<sup>55</sup> Dolman, *Warrior State*, 161.

notes that multiple questions are at issue in determining an answer to this question. First, can society tolerate the idea of a large standing army? Second, can a citizen militia with part time training protect the state?

In response to the first question, arguments against standing armies have faded since the advent of the Cold War. Society has proven its ability to tolerate large standing defense forces over the past 50 years. In response to the second question, Dolman goes so far as to declare that the “age-old” debate is over: due to the requirements of complicated technology, civilian and military leadership cannot rely on part-time militias to defend the state from external threats. Lynn notes that Hoplite Iron Age technology did not require much skill, and thus allowed full-time farmers and artisans to form a citizen militia. Spartans were the exception to this model, who by enslaving the Helots to do their farming were free to train and fight full time.<sup>56</sup> Lynn elaborates “In the citizen militia, morality and responsibility meet an ideal of civic virtue” as common people take up arms for their own defense.<sup>57</sup> On the other hand, Keegan points out a military defect in the traditional militia system that laid duty on landowners, or those with vested physical interest in the security of the state. Namely, it limits the size of the warrior class to a smaller group than all of those who are capable of providing for state defense.<sup>58</sup> Janowitz agrees, and further asserts that complex technology makes the temporary citizen army less important.<sup>59</sup>

Senior civilian and military leadership must challenge these assumptions as technology matures. For example, can computer technology become so simple to master

---

<sup>56</sup> John A. Lynn, *Battle: A History of Combat and Culture* (Cambridge, MA: Westview Press, 2003) 9.

<sup>57</sup> John A. Lynn, *Battle: A History of Combat and Culture* (Cambridge, MA: Westview Press, 2003) 27.

<sup>58</sup> John Keegan, *A History of Warfare* (New York: Vintage Books, 1993) 233.

<sup>59</sup> Janowitz, *Social Control*, 104.

that the temporary citizen army can manage war through it? If so, what are the predominant implications of tuning the force back towards temporary citizen-soldier militias? New tools of war like cyber attack may be extensions of citizens' private jobs that require very little time in training. For instance, computer coders might be tasked to develop a computer program that disrupts an enemy's centrifuge frequency to the point that it destroys the centrifuge's ability to enrich uranium. Or, taking the problem even further, military commanders can devise a very specific software-centric subset of an operational task without divulging the ultimate plan for the use of such a capability. The task could be distributed to universities as a student project in which teams are assigned to develop an algorithm that can get past a particular security system. However, to obfuscate and distribute the operations of warfare to unwitting combatants is unethical and would face strong societal resistance.

On the opposite side of the coin, senior military leaders can develop a force structure with the intent of driving civilian leadership force employment decisions. For example, General Abrams reorganized the army in the 1970s so that "[the civilian leadership] won't take us to war again without calling up the reserves."<sup>60</sup> Abrams' actions were part of the birth of the Total Force in which the reserves and guard became a more integral part of the employable force.

An additional model with which the United States has experimented very little is the employment of mercenaries. The mercenary model complicates a political entity's ability to secure the loyalty of the people who wield instruments of force on its behalf.

As Keegan states,

---

<sup>60</sup> Suzanne Nielsen and Don Snider, *American Civil-Military Relations: The Soldier and the State in a New Era* (Baltimore: Johns Hopkins UP, 2009) 111.

The danger inherent in the resort to mercenaries is that the funds necessary to support them may dry up before the contract reaches its agreed term, or that a war goes on longer than expected, with the same result, or that, if a state has been so miserly, complacent or supine as to depend exclusively on hired soldiers, the mercenaries come to see that they constitute the effective power within it. That, of course, was the issue in several Italian city states of the fifteenth century, where citizens had become too mercantile to do duty themselves but were too mean to pay for a standing force. In such circumstances it is their employers rather than the enemy that mercenaries confront with threat: they take sides in internal quarrels, they strike or blackmail for outstanding or extra pay, they may even go over to the enemy; at the very worst they seize power for themselves, as the condottieri Pandolfo Malatesta, Ottobuono Terzo and Gabrino Fodulo did, respectively, in Bescia, Cremona and Parma.<sup>61</sup>

For this very clear reason alone, that the mercenary model diminishes the loyalty of warriors to the state, the United States must eschew the mercenary model. American political debate about how its military serves must focus on standing forces versus militias. Either of these models must continue to swear allegiance to the Constitution, not a contract.

### ***Who Should Serve***

Senior leaders can also alter the character of society as they solve problems using adjustments to the military class. Civilian and military leaders can adjust the military class through conscription, inducements to an all-volunteer force, interconnectedness with civil society, education, and prestige.

Conscription introduces a number of properties to the relationship between the military and a particular society. First, a debate about a conscripted force elevates the concept of shared risk between society and the military. Second, the debate presents the concept of obligations of citizenship, as opposed to the more commonly-discussed rights of citizenship. Third, conscription necessitates the creation of an enforcement

---

<sup>61</sup> Keegan, *History of Warfare*, 231.

mechanism. Fourth, arguments about mandatory service or a conscripted force bring up the idea of society's desire to restrict military service to a particular subset of the population.

Any group of people that opts to establish a military structure does so to mitigate some degree of shared risk. In an all-volunteer force, the risk to any particular segment of society is minimized if they choose not to serve. In a conscripted force, risk is shared by all members of society who are eligible to be drafted. In the United States under the all-volunteer model, popular opinion holds that a smaller percentage of wealthy members of society accept the risk to enter military service. However, this opinion is not supported by data. A 2008 study by the Heritage foundation found that a greater percentage of military enlistees and officer recruits come from the top income quintile than from the bottom, by a margin of more than two-to-one. Furthermore, military recruits are more educated than their non-serving counterparts.<sup>62</sup> This disproportionate distribution of risk—more is taken on by the wealthy and educated—occurs despite some apparent barriers. For example, elite educational institutions like Harvard have shielded their students from the influence of Reserve Officer Training Corps detachments on their campuses over the past few decades. ROTC units on college campuses are a form of discourse that encourages students to personally assume some level of shared societal risk. The administrators of some of these institutions that, until recently, barred ROTC units from campus frame their decisions as merely a response to the executive policy that barred homosexual members of society from serving openly in the military.

---

<sup>62</sup> Shanea Watkins and James Sherk, "Who Serves in the U.S. Military? The Demographics of Enlisted Troops and Officers" *The Heritage Foundation* 21 Aug. 2008 online, Internet. Available: <http://www.heritage.org/research/reports/2008/08/who-serves-in-the-us-military-the-demographics-of-enlisted-troops-and-officers>

As opposed to the model in an all-volunteer force, a conscripted force mandates service as an obligation of citizenship. Interestingly, the discourse in the United States tends to gravitate toward rights rather than obligations. Janowitz is one of the voices who addresses the paucity of mention of the obligations of citizenship in contrast to the frequency with which rights are discussed in America.<sup>63</sup> Stanley McChrystal echoes Janowitz:

But as important as inalienable rights are, there are also inalienable responsibilities that we must accept and fulfill. Those responsibilities are wider than are often perceived or accepted. Just as we have allowed the term “service member” to apply solely to the military, we have allowed the obligations of citizenship to narrow.

Even the most basic responsibilities of being an American are considered optional by many. In the seeming anonymity of modern life, the concept of community responsibility has weakened, yet is needed more than ever.

Responsibility is most easily accepted when the need is clear and expectations are defined by tradition.<sup>64</sup>

To counterbalance this societal focus on rights ahead of obligations, Dolman recommends reinvigorating the symbolic power of registering for the draft when you register to vote.<sup>65</sup> Alternatively, Huntington notes the power of leadership as he highlights Leonard Wood’s role as a proponent of discussing obligations before rights. Fittingly, Wood saw the army as an embodiment of the people rather than a career of a chosen class. He saw preparedness as the principal obligation of citizenship.

If you were living under conditions which rendered it necessary for your boys and men to furnish the crews for the life boat service you would see to it that they knew how to row and swim so that they would be prepared for the dangers of the work which you knew would some day come to

---

<sup>63</sup> Janowitz, *Social Control*, 197.

<sup>64</sup> Stanley McChrystal, “Step Up For Your Country,” *Newsweek* 31 Jan. 2011: 36.

<sup>65</sup> Dolman, *Warrior State*, 168.

them and if anyone pressed untrained boys into such service you would say that it was little short of murder.<sup>66</sup>

In the current fiscal environment, another argument in favor of an all volunteer forces echoes from the 1970s when the all-volunteer force was created. Namely, the 1970 Nixon-appointed commission that recommended moving from a conscription force to an all-volunteer force noted that the program “would be unsustainable over time if it did not end the twenty-year cliff vesting retirement, the up and out promotion system, and change the pay and compensation from time in grade to skills and performance.”<sup>67</sup> Furthermore, Arnold Punaro, the Department of Defense’s Reserve Forces Policy Board chairman, says “The all-in cost of the all-volunteer force is one of the time-ticking bombs that could explode our defense capabilities if not dealt with responsibly.”<sup>68</sup> To answer the question of whether an all-volunteer force is sustainable, Secretary of Defense Leon Panetta established the Military Compensation and Retirement Modernization Commission. Its task is to make recommendations to modernize the compensation and retirement systems in order to ensure the long-term viability of the All-Volunteer Force.

However, even if affordable, a policy of conscription requires enforcement, which raises the question: how mandatory is mandatory? For example, Grover Cleveland and John D. Rockefeller, both able-bodied men, avoided the draft during the US Civil War by paying a \$300 fee for a substitute draftee, a practice provided for in the Enrollment Act of 1863.<sup>69</sup> Additionally, the state of Israel requires service from all of its citizens over the age of 18, but not all serve. Indeed, a large part of Israeli national identity is based upon

---

<sup>66</sup> Leonard Wood, *The Military Obligation of Citizenship* (Princeton: Princeton UP, 1915) 48.

<sup>67</sup> Walter Pincus “The unaffordability of the all-volunteer military” *Washington Post* 15 Jan. 2013: A13.

<sup>68</sup> Walter Pincus “The unaffordability of the all-volunteer military” A13.

<sup>69</sup> Michael T. Meier, “Civil War Draft Records: Exemptions and Enrollments,” *Prologue Magazine* 26.4 (1994): 1.

universal service in the “people’s Army.” Based upon that principle, their high court struck down a law that exempted religious students from service in 2012.<sup>70</sup> Nonetheless, according to a study by Haifa University published in August of that same year, the share of military-age Jewish Israelis who do not serve grew from 12.1% to 26% from 1980-2007. The Israeli Defense Forces predict that this number will grow to 43% by 2020.<sup>71</sup> Clearly, even a policy of mandatory service excludes many individuals from such an obligation.

Furthermore, a society that establishes a conscripted force must still define the acceptable conscript. Some minimum standard of mental and physical ability, as well as integrity, must be met. Gerson recommends against the draft because, although it represents more of society, that means you get the unfit people and the criminals too.<sup>72</sup> However, the character of war today allows for multiple modes of military service that do not require physical fitness. For instance, pilots of remotely piloted aircraft execute their missions from a physical location far distant from the lines of combat. The tasks they perform do not necessarily require a high level of fitness.

Finally, some policymakers argue that a draft is incoherent with the American “soul.” Specifically, Nobel laureate economist Milton Friedman, a member of the Gates Commission on an All-volunteer Force, claims a draft is inconsistent with the American values of choice, personal liberty, and a free society.<sup>73</sup>

Aside from conscription, civilian and military leadership can shape the military class by modifying inducements to an all-volunteer force. Inducements, such as salary,

---

<sup>70</sup> Karin Brulliard, “Governing coalition in Israel loses key party,” *Washington Post*, 18 Jul. 2012, kindle edition.

<sup>71</sup> Janine Zacharia, “Israeli’s military faces loss in recruits, status,” *Washington Post* 7 Nov. 2012. A14.

<sup>72</sup> Michael Gerson, “Wars we’ve left behind,” *Washington Post* 29 Oct. 2012: A23.

<sup>73</sup> Melvin R. Laird, “We don’t need a draft,” *Washington Post* 23 Feb. 2013: A19.

bonuses, leave, medical care, and other benefits and entitlements, help define who serves and what motivates them for continued service. The social and economic climate will inevitably alter the effectiveness of these inducements. For example, the great depression drove students to apply for the military academies for the free education, not so much the traditional motivations of ambition or tradition.<sup>74</sup> This is described as the rise of careerism. Arguably, careerism ensures loyalty to a lesser degree than tradition, ambition, or prestige.

One inducement to continued military service is a favorable system of promotions and pay raises. In modern society, this aspect of military service is one that military members often compare with the civilian sector when they decide to stay or leave the service. Tim Kane, chief economist at the conservative research group The Hudson Institute, wrote a book called *Bleeding Talent* in which he argues that the military institution loses its most talented individuals because of the way it dictates career moves. Mr. Kane opines that “the root of all evil in this ecosystem” is the Defense Officer Personnel Management Act (1980). “That act binds the military into a system that honors seniority over individual merit.”<sup>75</sup> According to the book, fewer than 10% of West Point grads think the services keep their best officers, due to frustration with the military bureaucracy. Kane suggests a “monster.com” type of personnel management system to allow greater personal choice in assignments. However, to restructure the personnel system in this direction would likely breed different loyalties than the current system, which ensures loyalty to centralized Air Force values rather than to a particular commander or regional network of leaders.

---

<sup>74</sup> Janowitz, *Professional Soldier*, 116.

<sup>75</sup> Fred Andrews, “The Military Machine as a Management Wreck” *New York Times*, 6 Jan. 2013: BU5.

Senior leadership can also help define the degree to which the military remains connected with civil society. Policies help determine whether military organizations are primarily fenced off in remote locations, or collocated and intermingled in large civilian populations. The trend over the second half of the twentieth century was toward greater connectedness. A previously isolated officer corps has shifted towards a profession with elaborate contact with civil society, and military and civilian work and residences are intermingled. Fewer officers live on base and shop at the commissary.<sup>76</sup> The military is no longer a military community that is closed to civilians.

Senior leaders' decisions on seemingly unrelated issues also adjust the degree of civil-military interconnectedness. The amount of base housing available helps determine whether service men and women live on or off base. As bases are closed or new ones are opened, the size of the surrounding cities and towns decides the number of civilians who are exposed to military personnel in their neighborhoods, stores, and entertainment venues. Additionally, a military that depends more upon its reserves will tend to be more interconnected with society, as those individuals will participate in civilian employment when they are not mobilized for duty.

Another determinant of the character of the military class involves education. Civil-military leaders must decide who to educate, and to what degree. Mandatory state-sponsored education is the norm in the United States, but it does not have to be. In a more austere fiscal environment the government can decide not to educate the masses, but to count on private individuals who understand the value of education to continue to educate their progeny. The military could provide early childhood and secondary

---

<sup>76</sup> Janowitz, *Professional Soldier*, 178.

education to the children of service men and women, forming another inducement to military service.

On the other hand, rather than providing a minimal education as an inducement to service, the government could choose to focus its education investment on elite students. A recent book-length study on education in America, “Exam Schools: Inside America’s Most Selective Schools” describes the general trend of federal education funding in the United States: “As more money and energy went into advancing equity in American K-12 (and higher) education, less was devoted to the pursuit of excellence.”<sup>77</sup> Each of these competing education priorities—a basic education for the whole society or an exceptional education for the most talented individuals—increases the quality of the pool of potential military recruits. The former model broadens the pool of minimally qualified individuals, the latter model expands the talent base of potential military leaders.

The direction of the civil-military nexus also depends upon the level of prestige afforded to the military class. A more prestigious military class encourages the “best and brightest” to serve, whereas a less prestigious military class will discourage service among the most capable and talented individuals. In 1955 the military officer was ranked seventh in public perception of prestige of professions.<sup>78</sup> Although this perceived level of prestige waxes and wanes, it is determined by a number of factors: strength of numbers and size of infrastructure, the size of the arms industry, and the political structure of the society in which it resides.<sup>79</sup> Senior military leaders can influence each of these factors through their decisions, with more impact on the former than the latter.

---

<sup>77</sup> Robert J. Samuelson, “Good questions on education,” *Washington Post*, 29 Dec. 2012: A23.

<sup>78</sup> Janowitz, *Professional Soldier*, 227.

<sup>79</sup> Nielsen and Snider, *American Civil-Military Relations*, 231.

These decisions can help drive political structures over the long term. In one example, Skocpol notes that to prevent the outbreak of social revolutions, it is imperative that militaries be organizationally and socially distinct from the dominant economic classes of the states they serve.<sup>80</sup> Such a distinction allows dominant classes to leverage military power against other classes. This distinction also shows the importance of inculcating loyalty to the state in the military, not loyalty to any other aspect of society such as a class, a party, a region.

The discourse of securitization that defines threats also helps determine who will serve. Han China presents an example. The Han dynasty succeeded the Warring States period during which factions within China fought each other for political dominance. As the Warring States period gave way to unity, Han China viewed the threat as paramount at the frontiers. Initially, the Han dynasty continued the mandatory conscription of the Warring States period that required every free adult male between the ages of 23-56 to serve for two years. However, as the threat was redefined, the state turned from conscripts to barbarian allies and frontier-stationed units as their primary guarantors of security. They also employed criminals whose sentences had been commuted to military service.<sup>81</sup> Essentially, as the threat became more peripheral, the warring class did too.

Ultimately, the structural issues that determine the relationship between society and the military are likely to be decided when they are securitized and used as a means to resolve a different issue. However, the leaders who make these civil-military decisions must have at least a peripheral view of the societal changes their decisions will bring.

---

<sup>80</sup> Theda Skocpol, *States and Social Revolutions: A Comparative Analysis of France, Russia, and China* (New York: Cambridge UP, 1979) 290.

<sup>81</sup> John A. Lynn, *Battle: A History of Combat and Culture* (Cambridge, MA: Westview Press, 2003).37.

Unlike the military structure, however, the military mission is usually decided not incidentally, but rather with a specific focus on choosing which missions to perform.

### **The Military Mission**

The missions charged to the armed forces are not static. They too, like the organizational structure of the military itself, influence the character of society and vice versa. Two significant poles exist in the debate about what military missions senior leaders should pursue. On one side exists the expanding use of the military to perform operations other than war: peacekeeping and humanitarian aid, for example. The other pole holds that the military should be used only for warfare, or maximum destructive effect. In this section, I examine the two poles.

#### ***Military Operations Other Than War (MOOTW)***

Janowitz' concept of a constabulary force helps define one powerful pole in the debate: a mission set that encompasses numerous types of military operations other than war. Furthermore, his concept is a good fit for the set of missions that comprise what people sometimes imprecisely label postmodern warfare. This set of missions includes cyberwar, peacekeeping, humanitarian aid, and just about any type of operation the military carries out that does not fit under the traditional paradigm of war as violent battle. The constabulary force concept speaks to the blurred distinction between war and peace, it recognizes the preventative nature of military missions other than war, and it addresses the military's commitment to the minimum use of force to achieve specific political objectives rather than victory.

In introducing the constabulary force, Janowitz contends that the officer corps should no longer operate on 'peacetime' or 'wartime' standards because the line between

what is peace and what is war has become blurred.<sup>82</sup> The Stuxnet virus, for example, illustrates this vague distinction. The source of the Stuxnet computer virus that debilitated approximately 1,000 of Iran's 5,000 uranium enriching centrifuges is unclear. David Sanger wrote a front-page article for the *New York Times* that declared the virus had been developed by the United States and Israel, and was directly authorized by President Obama.<sup>83</sup> Sanger's narrative was considered a potential leak of sensitive information, and congressional hearings were set up to investigate. At the hearings, one Representative concluded that Sanger either made up the information or a leak had occurred. Representatives from the White House refused to discuss the possible leak. Additionally, Vice Prime Minister of Israel Moshe Ya'alon's statements about the cyberattack were widely interpreted as an admission of complicity.<sup>84</sup>

Consequently, a long train of events with numerous participants slowly unraveled the source and result of the cyberattacks. Walter Pincus unfolds the story as follows: In 2008, President Bush authorized the virus, dubbed Olympic Games. In June 2010 a Belarus-based security firm first reported a virus that affected control systems in various industries. In July 2010, Symantec, a US-based computer security company that employs people in fifty countries, noted that the virus had infected nearly sixty percent of personal computers in Iran, and thereby concluded they were the main target of the attack. In August 2010, Moscow-based computer security company Kaspersky Lab, which operated in two hundred countries, dubbed the virus Stuxnet. *Wired* reported in July 2011 that Stuxnet had sabotaged centrifuges at the Iranian nuclear facility at Natanz, and that

---

<sup>82</sup> Janowitz, *Social Control*, 418.

<sup>83</sup> David Sanger, "Obama Order Sped Up Wave of Cyber Attacks Against Iran," *New York Times* 1 Jun. 2012: A1.

<sup>84</sup> Walter Pincus, "House GOP shouldn't rush to judgment on cyberweapon 'leaks'" *Washington Post*, 19 Jul 2012, A15.

inspectors from the International Atomic Energy Agency noticed the effects the previous January. In October, a Hungary-based laboratory discovered Flame, a precursor to Stuxnet, and Kaspersky Labs disclosed details of Flame's espionage capabilities in May 2012. Iran's national computer emergency team, Maher, admitted that it had discovered the targeted Flame and Stuxnet attacks in June 2012.<sup>85</sup>

Whether or not the United States and Israel were complicit in the attack, few would argue that the authors of the virus were "at war" with Iran, yet the code clearly carried malicious intent toward one state that was attempting to progress in nuclear capability. Wired magazine dubbed Stuxnet "the world's first real cyberweapon."<sup>86</sup> Attacks had been waged, weapons had been used, powerful states appeared to be responsible for these events, yet the line that demarcates war from other forms of human conflict had not yet been crossed.

The Global War on Terrorism provides another example of this blurred distinction between war and "not war". Arguably, the United States military is engaged in a permanent war against the tactic of terrorism. Service men and women who are not even on duty are engaged in this war in their day to day lives. They are charged with keeping vigilance against any potential threats, which could manifest themselves in any place at any time.

In addition to the sense of permanent war that such a blurred distinction creates, the military is also tasked with preventing the outbreak of more traditional warfare. Art Cebrowski, Director of the Office of Force Transformation, said "the broad strategic

---

<sup>85</sup> Pincus, "House GOP shouldn't rush to judgment on cyberweapon 'leaks'," A15.

<sup>86</sup> Kim Zetter, "How Digital Detectives Deciphered Stuxnet, the Most Menacing Malware in History," *Wired* 11 Jul. 2011, online, Internet 9 Jan. 2013. Available: <http://www.wired.com/threatlevel/2011/07/how-digital-detectives-deciphered-stuxnet/>.

thrust of the nation is to move from being reactive to preventative. You have to be engaged around the world.”<sup>87</sup> Indeed, the United States military is engaged around the world. The geographic combatant command structure divides the entire Earth into regions and gives one American commander responsibility for each of those regions. Whether or not the United States is at war with another state in his region or not, the geographic combatant commander commands thousands of personnel and billions of dollars per year in resources. Spending public money on “permanent war” takes place despite annual budget deficits that have run more than \$1 Trillion per year since 2009.<sup>88</sup>

On top of the blurred distinction between war and peace and the preventative nature of the constabulary force, Janowitz concludes that the military establishment becomes a constabulary force when it is committed to the minimum use of force and seeks viable international relations rather than victory.<sup>89</sup> This element of the constabulary force as an exemplar of the MOOTW mission set most clearly contrasts with its opposite pole: the military as a war machine.

## **War**

The more traditional mission for the military is war. Clausewitz defines war as an act of force to compel an enemy to do your will.<sup>90</sup> In his treatise *On War*, he elaborates that war exists in danger and can be described using a paradoxical trinity of emotion, chance, and reason.<sup>91</sup> These three legs of the trinity involve the violence of the people,

---

<sup>87</sup> Adams, *Army After Next*, 168.

<sup>88</sup> “US Office of Management and Budget, Historical Tables,” Whitehouse.gov 17 Jan. 2013 online, Internet. Available: <http://www.whitehouse.gov/omb/budget/Historicals>

<sup>89</sup> Janowitz, *Social Control*, 418.

<sup>90</sup> Clausewitz, *On War*, 75.

<sup>91</sup> Clausewitz, *On War*, 88.

the courage of the commander, and the policy of the government, respectively.<sup>92</sup> War is comprised of elements of danger, exertion, uncertainty, and chance.<sup>93</sup>

Clausewitz's theory about war draws a much tighter circle around the proper mission set for the military. In his view, the military exists to defeat the enemy army in battle.<sup>94</sup> Strategy itself is nothing more than the use of the engagement for the purpose of the battle.<sup>95</sup> To Clausewitz, the military must maximize its capacity for destruction.

Dolman agrees. He argues the military's primary purpose to maximize destruction, and therefore peacekeeping is an unacceptable role. However, he admits that humanitarian aid is a reasonable role for the military because it can serve as good training for the maximum destruction paradigm through the practice of airdrops and massive logistical operations.<sup>96</sup> Of course, a similar argument can be made for the utility of peacekeeping operations, in which troops are deployed, must maintain good order and discipline, and meet many of the logistical demands of a combat deployment. Dolman makes no allowance for such an argument, but instead focuses on the nature of peacekeeping as an inducement to minimizing destruction. Either way, the nature of peacekeeping and humanitarian aid makes them debatable mission sets in the traditional conception of warfare.

Despite its vast investment in MOOTW, part of the American identity is a public preference for this traditional combat-centric mission set. A good example of this characteristic is President Bush's declaration in 2003 that major combat operations in Iraq had ended. His decree, literally promulgated under a banner that said "mission

---

<sup>92</sup> Clausewitz, *On War*, 89.

<sup>93</sup> Clausewitz, *On War*, 104.

<sup>94</sup> Clausewitz, *On War*, 596.

<sup>95</sup> Clausewitz, *On War*, 177.

<sup>96</sup> Dolman, *Warrior State*, 177.

accomplished,” decisively demonstrated what warfare meant to him. The decade of armed conflict that followed the stated “end” is the type of warfare that Americans typically eschew, ignore, and treat as an anomaly—until it happens again.

The 2010 Annual Strategy Conference Report of the Strategic Studies Institute describes this preference as follows:

War, as the DoD prefers to see it, pits one state’s military against another’s. The DoD’s view reflects the American tradition of war as binary, organized, discrete (with an identifiable beginning and end), and predominantly military in origin and character. But in the contemporary security environment, that type of war is much less likely than other forms of armed violence.<sup>97</sup>

This identity preference helps determine how the US military organizes, trains, and equips its forces for future conflict, and in turn helps determine the statesman’s decision to intervene in a foreign conflict. Specifically, the senior leader will envision what mission sets will make up the proposed intervention. Then, senior military leaders will advise their civilian masters as to the preparedness of the force to execute such missions. American civilian and military leaders will tend to look more favorably upon armed intervention that promises to resemble something more like battle than nation building.

Senior civilian and military leaders make decisions to solve numerous problems that can be securitized in various ways. Their theoretical framework for understanding the civil-military relationship will influence their decisions, that can alter the shape of the military and society. Individual leaders have greater and more immediate control over the civil-military relationship than the other two dimensions of postmodern warfare: global political structure and technology. People can change how the military is

---

<sup>97</sup> Steven Metz and Phillip Cuccia, “Defining War for the 21<sup>st</sup> Century” *2010 SSI Annual Strategy Conference Report* (Carlisle, PA: Strategic Studies Institute, 2011) 37.

structured and how it is used. They can affect such change within the constraints of current political structures and ongoing technological innovation.

If the military is viewed as a war machine, built to maximize its capacity for destruction and used exclusively in mission sets coherent with this purpose, it will shape society in a different direction than if the military is a vast collection of capabilities always engaged in some sort of political operation. In the next section I focus attention on the line between modern, or *status-quo*, civil-military relations and postmodern civil-military relations.

### **Synthesis – Postmodern Civil-military Relations**

The line of demarcation between modern and postmodern civil-military relations is drawn to some degree according to “which came first, the chicken or the egg.” In modern civil-military relations the society is established first, before the military structure. Geography largely draws the lines that determine the state that the military serves. The people within those borders establish, over time, a set of security institutions and procedures that define the identity of the military and, in turn, society. The missions charged to the armed forces arise, in part, as a result of an unstated national identity of which senior civil-military leaders might not even be cognizant. Members of the society have relatively little short term influence over this national identity that shapes the military, but leaders’ decisions have significant long-term impact. In a modern civil-military relationship, to arrange a security structure with an entirely different identity people have to overcome tremendous inertia. To exact such change rapidly, they have to physically move to a new state.

Postmodern civil-military relations establish a security structure first, with a stated identity and a clear sense of what constitutes a foreign threat. People are drawn to that society based upon its identity, and the barriers to entry are low. The hypothetical online security guarantors at the beginning of this chapter serve as examples of a postmodern civil-military relationship. This relationship is based on ideals more than on geography.

Casting aside hypothetical and fictional security organizations, contemporary leaders have the opportunity to drive towards a postmodern military; a military based on a coherent set of ideals. To do so, the leader must recognize the value of framing security issues from a postmodern theoretical approach. Namely, civilian and military leaders can securitize issues in order to justify a preferred military organization. They can do so despite any countervailing discourse that securitizes objective threats as the basis for a particular military decision. For example, although history shows a need to counteract the threat of terrorism or insurgency on foreign soil every few decades—a mission accomplished through use of a large, technologically-agnostic ground force—leaders can turn the discourse to other objective threats, such as Chinese military technology.

Leaders can also attempt to securitize specific issues in order to upend modern norms. For example, a postmodern civil-military agreement might alter the basic contract between the government and society about whom it educates. Instead of providing a basic level of education to the masses, a postmodern society might decide to educate only an elite subset of its population in pursuit of excellence. This subset could be educated and trained for warfare from a very early age, selected based on genetic traits, for example. This construct could extend beyond education into all aspects of social life.

Perhaps a postmodern civil-military relationship could be defined by Nietzsche's prescription "man shall be trained for war, and woman for the recreation of the warrior: all else is folly."<sup>98</sup> To drive toward such a postmodern arrangement, leaders would have to highly securitize the issue of military education. They would have to highlight at every turn the threat of an undereducated military, and the inappropriate balance of federal education funding toward poor people who are less likely to serve in the military. Nowhere in our nation's founding documents does it say, they might argue, anything about an inalienable right to education. That money must be spent on educating those who are most likely to protect our life and liberty.

A postmodern civil-military relationship could create a coherent vision for the functional purpose of society itself. Does society operate to create wealth and power, or justice and equity? Buzan sketches various sides of the debate about the purpose of wealth and society: "Mercantilists see the state as the embodiment of the purpose for which wealth is generated. Liberals see the economy as the reason for the state. Socialists are in the middle: the economy is the root of society, but states must tame economics toward goals of justice and equity."<sup>99</sup> A postmodern civil-military structure would form military-political entities organized around factions that emerge from this debate. For instance, a capable group of computer hackers around the globe—undivided on the question of the purpose of wealth and society—might coalesce around the notion of justice.

The traditional civil-military principal-agent relationship is another modern norm that could be upended in transition to postmodern forms. This would involve a shift from

---

<sup>98</sup>Friedrich Nietzsche, *Thus Spake Zarathustra*, trans. Thomas Common (New York: The Modern Library, 1999) 69.

<sup>99</sup> Buzan, *Security*, 95.

the state-populace relationship to something possibly more dynamic. For instance, isolationists could form security groupings by securitizing threats like poverty, drugs, and infrastructure ahead of foreign state threats. In the discourse between the military and a democratic society, people define what is foreign first, and then assess the threat from that foreign danger.

An example of discourse about postmodern civil-military relations, Nathan Freier of the Center for Strategic and International Studies recognizes a change in the character of conflict in the twenty-first century. He believes that the legacy defense *status quo* is out of synch with this new character. He says that the United States must decide whether the Department of Defense should be the successor to the War Department and continue to focus primarily or even exclusively on interstate war, or should be something fundamentally different and broader.<sup>100</sup> It is unlikely, however, that the United States government will alter the military structures and missions that it pursues in order to become a particular society. It is more likely to alter its missions and structures in response to particular threats or situations that get securitized for some other purpose, such as the securitization of a cyber-security threat from internet security organizations. Due, in part, to its modern, institutionalized civil-military relations, the United States remains firmly rooted in the era of modern warfare.

Williams defines sovereignty by the act of decision, the capacity to definitively decide when a threat to the political order becomes an emergency and requires the suspension of the normal rules and procedures.<sup>101</sup> Thus, Huntington's functional imperative—the objective threat—is so easily subject to discursive change through

---

<sup>100</sup> Metz and Cuccia, "Defining War for the 21<sup>st</sup> Century," 37.

<sup>101</sup> Williams, "Words, Images, Enemies," 516.

securitization. The societal imperative—identity—trumps the functional imperative in creating reality. Senior civilian and military leaders within a society decide the purpose, structure, and missions of the military. Ultimately, whether modern or postmodern, a military exists for the function of politics, which includes identity, grouping, and securitization.

Leaders must recognize that their decisions have massive societal implications, and they should make decisions based in part upon potential long-term consequences, even if they are solving narrow, short-term problems. For example, if they want to avoid altering the modern global political structures described in Chapter 3, they should continue to invest in a large, technologically advanced standing force that distracts the public from the ultimate aims of conflict—wealth? justice?—and focuses their attention on the shock and awe of battle instead.

Furthermore, technology will change the civil-military relationship. For instance, the Jeffersonian rationale for investing in simple technology—to ensure that a citizen-soldier army can easily use it—might become irrelevant in the face of twenty-first century smart technology. If technology becomes easier to manipulate as it gets smarter, less training will be required, and civil-military leaders could return to a citizen-soldier construct in which citizens can be called up and trained for duty in a matter of days or weeks rather than years. In this sense, perhaps postmodern technology can unify the historical American way of war—the Jeffersonian citizen-soldier—with the modern American way of war— industrial high technology. It would be a welcome change from

the twentieth century “dangerous American tendency” to “seek refuge in technology from hard problems of strategy and policy.”<sup>102</sup>

---

<sup>102</sup> Weigley, *American Way of War*, 416.

## Chapter 5

### Technology

*A technological civilization makes stability impossible. It changes the circumstances of life too rapidly to incline any one to a reverent acceptance of an ancestral order.*

*-- Reinhold Niebuhr*

### Background

*During the aerial conflict with the Russian Federation, the US F-35 fleet had performed remarkably. Operators in the Lightning II aircraft were trained to rely upon the “brains” of the fighter: the 25,000 lines of software code called “fusion” that synthesized information collected by the aircraft’s sensors, integrated it with information collected from other assets and presented only the most critical data to the pilot in the cockpit. Pilots in this battle did not operate a radar to acquire potential targets, interrogate those targets for information about friend or foe status, lock-on to them and fire missiles to kill. Instead, they added symbols from their displays to various shoot lists, and then consented to weapon release when fusion found the conditions acceptable.*

*The real aerial battle occurred long before weapons consent; it occurred in an invisible battery and counter-battery of digital transmissions. Fusion would take in all emission data from the environment, figure out the right algorithm with which to process the digital transmissions, assign the right aperture for response, and fire off a digital emission counterattack of its own. All of this occurred at the speed of light, without even the pilot’s awareness, much less consent.*

*Meanwhile, however, the reserve forces who were left stateside had to counter a more difficult foe. Online coalitions could intercept one of the thousands of drones that were operating in US Federal Aviation Administration airspace and use them in kamikaze-style attacks against the server locations of coalitions that opposed them. These server attacks did not spare the government, either. When the FAA grounded all flights after the first dozen drone attacks on its servers, hackers gained access to the FAA system and authorized a resumption of drone missions for the purpose of “surveillance over rogue anti-government elements.” In actuality, it was anti-government coalitions that sent such authorization and then commandeered the aircraft, unbeknownst to the men and women who controlled the airspace through which the drones operated.*

Technology changes the character of society. For example, online social media enabled the organization and planning necessary for the Arab Spring uprisings of 2011-12. Such dispersed—yet unified, sustained, and organized—protests were not possible 100 years ago.<sup>1</sup> Such organization prior to World War I was carried out independently within nations, and geographic state boundaries were a strong impediment to the flow of information. When socialist leaders wanted to organize protests to prevent war during the crisis after the assassination Franz Ferdinand, they were stifled by an inability to communicate and organize without precipitating the crisis.<sup>2</sup> A communication vehicle like Twitter in 1914 would have enabled like-minded people across state borders to present a coherent, non-violent voice in the narrative as war approached.

Technology changes the character of the military as well. No shortage of voices has expressed an opinion as to how technology has changed or will change the military.

---

<sup>1</sup>Barbara Tuchman, *The Proud Tower: A Portrait of the World Before the War (1890-1914)* (New York: Ballantine Books, 1962) 448.

<sup>2</sup> Tuchman, *Proud Tower*, 459.

In *Pursuit of Power*, McNeil describes the industrialization of war from 1840-1884. That period saw the rise of iron-clad ships, the Mineé Ball, and the mass production of small arms evident in the Crimean War.<sup>3</sup> Military adoption of technological innovations also spurs fierce interservice rivalries that shape organizational structures. For example, competition between the US Army and US Air Force set the stage for determining the future of intercontinental ballistic missiles under primarily Air Force stewardship.<sup>4</sup>

One specific example of this interplay between the military and technology is that technology drove the development of the Air-Sea Battle concept. Greg Jaffe tells briefly of the birth of the concept in an article about Director of the Office of Net Assessment Andrew Marshall.

Air-Sea Battle grew out of Marshall's fervent belief, dating to the 1980s, that technological advancements were on the verge of ushering in a new epoch of war.

New information technology allowed militaries to fire within seconds of finding the enemy. Better precision bombs guaranteed that the Americans could hit their targets almost every time. Together these advances could give conventional bombs almost the same power as small nuclear weapons, Marshall surmised.

Marshall asked his military assistant, a bright officer with a Harvard doctorate, to draft a series of papers on the coming "revolution in military affairs." The work captured the interest of dozens of generals and several defense secretaries.<sup>5</sup>

In a similar way, future technological innovation promises to change the military as well. For example, in *Democratizing Destruction*, Krepinevich—who was the "bright officer with a Harvard doctorate" described above, and who now runs the Center for Strategic and Budgetary Analysis, one of the top recipients of Marshall's annual study

---

<sup>3</sup> William H. McNeill, *The Pursuit of Power: Technology, Armed Force, and Society since A.D. 1000* (Chicago: The U of Chicago P, 1982) 230.

<sup>4</sup> Neil Sheehan, *A Fiery Peace in a Cold War: Bernard Schriever and the Ultimate Weapon* (New York: Vintage Books, 2010) 315.

<sup>5</sup> Greg Jaffe, "Real tensions over a theoretical war" *Washington Post* 2 Aug. 2012: A1.

funds—anticipates numerous coming changes in warfare including an increase in the incidence and presence of cyberattacks, biowarfare, and robotics.<sup>6</sup>

Nonetheless, conventional wisdom in the conversation about military technology is overblown. Ubiquitous and imprecise statements like “the US Department of Defense is expecting pilotless aircraft the size of F-16 jet fighters to suppress enemy air defenses and sensors by 2012”<sup>7</sup> are anywhere from misleading to absurd. Of course, consistent with American identity, they help sell books. Such sensational assessments abound in every technological field. In information technology: “Humans are still crucial for interpreting information, although there are many plans in the works to use machines in this role.”<sup>8</sup> In robotics: “the US military has been striving for years to replace soldiers in battle with machines;”<sup>9</sup> and “soon...military robots will be able to pick out human targets on the battlefield and decide on their own whether to go for the kill...A robotic arms race seems inevitable.”<sup>10</sup> Some commentators even attribute technological science as the reason for western hegemony in the modern global political structure.<sup>11</sup>

Despite the proliferation of such overstated observations, technological innovation does account for two unequivocal changes for the military. First, technology changes the means and danger of attack. Prior to the adoption of airpower in the early 1900s, people could be subject to attack from the land or the sea. States organized, trained, and equipped armies and navies to provide security against these threats and to

---

<sup>6</sup> Andrew Krepinevich, “Democratizing Destruction,” *Foreignpolicy.com* 7 May 2012 online, Internet. Available:

[http://www.foreignpolicy.com/articles/2011/08/15/get\\_ready\\_for\\_the\\_democratization\\_of\\_destruction](http://www.foreignpolicy.com/articles/2011/08/15/get_ready_for_the_democratization_of_destruction).

<sup>7</sup> Joel Garreau. *Radical Evolution: The Promise and Peril of Enhancing Our Minds, Our Bodies--and what it means to be human* (NY: Broadway Books, 2005) 125.

<sup>8</sup> Chris Hables Gray, *Postmodern War: The New Politics of Conflict* (New York: The Guilford Press, 1997) 39.

<sup>9</sup> Gray, *Postmodern War*, 42.

<sup>10</sup> Tom Malinowski, “A dangerous future of killer robots” *Washington Post*, 23 Nov. 2012: A23.

<sup>11</sup> Gray, *Postmodern War*, 110.

project power in the land and sea domains. Due to technological innovation, threats today emanate from the air, space, and cyberspace. Second, technology also changes the subjective human perception of threats. As Buzan describes, geography shapes the perception of threats through the importance of distance and terrain.<sup>12</sup> Technology changes the relative importance of physical geography.

## **Technology and Warfare**

### ***History***

Technological innovation and war share a long and storied history. Technology can play a role as an element of surprise in a military endeavor. As Michael Handel describes in “Technological Surprise in War”:

The unexpected appearance of new weapons on the battlefield, from the stirrup to the atomic bomb can have a critical impact on the outcome of war. The history of warfare from antiquity to the present records innumerable attempts to secure by some new contrivance an immediate tactical advantage, perhaps a decisive one. In such inventions the essential purpose is to obtain one's end before the adversary can bring counter-measures to bear. It is the time interval that counts.<sup>13</sup>

Handel describes the pursuit of technology to achieve a tactical advantage. His assessment allows for the inevitable counter-tactics or counter-innovations that new technologies quickly spur. He focuses on the immediate tactical advantage, and the possibility that the wielder can leverage that tenuous degree of superiority for strategic political gain.

On the other hand, in some cases clearly superior technology can be overwhelmed by mass or tactics. The Battle of Isandlwana stands out as an example. The battle was

---

<sup>12</sup> Barry Buzan, Ole Waever, and Jaap de Wilde, *Security: A New Framework for Analysis* (Boulder, CO: Lynne Rienner Publishers, 1998) 59.

<sup>13</sup> Michael Handel, “Technological Surprise in War,” *Intelligence and National Security* 2.1 (1987): 1.

precipitated by the Zulu Kingdom's refusal to hand over a number of its members who were accused of murdering British subjects. In this battle, the British, led by Lord Chelmsford, were far outnumbered by their Zulu enemy but were confident of victory owing to their far superior technology that included the state of the art Martini-Henry breech-loading rifle. Zulu warriors, although greater in number, were armed with only spears and a few old muskets.<sup>14</sup> Nonetheless, the 20,000-man strong Zulu force soundly defeated the 1,300-man British invasion.

In some cases, even technological advances that bring tactical surprise have no discernible effect when introduced in battle. For example, Zaloga points out that the Soviet T-34 tank, although widely acknowledged to be a major advance in tank design, had no significant effect when it was introduced in June 1941 during Operation Barbarossa.<sup>15</sup> It simply was not a match for the German Blitzkrieg. Van Creveld articulated a useful concept to help explain such an outcome: technology needs to fit the enemy's technology and tactics to achieve victory.<sup>16</sup> The T-34 was not a fit against Blitzkrieg. Perhaps a simpler explanation is that new technology does not account for the entirety of "instruments of coercion" that create power. People bearing spears—and even rough Russian winters—count too.

Technology can introduce strategic surprise into narratives larger than tactical engagements. The most salient example of such strategic technological surprise in the modern era is the Soviet launch of Sputnik in 1957. More than ten years prior to the

---

<sup>14</sup> Kennedy Hickman, "Anglo-Zulu War: Battle of Isandlwana" *About.com*, online, Internet 14 Dec. 2012. Available: <http://militaryhistory.about.com/od/battleswarss1800s/p/isandlwana.htm>

<sup>15</sup> Steven Zaloga, "Technological surprise and the initial period of war: The case of the T-34 tank in 1941," *The Journal of Slavic Military Studies* 6.4 (1993): 634.

<sup>16</sup> Michael Vlahos, *Fighting Identity: Sacred War and World Change* (Westport, CT: Praeger Security International, 2009) 174.

launch, a RAND study concluded that launching a satellite would have a large political impact.<sup>17</sup> President's Eisenhower and Kennedy both recognized they were engaged in a space race against the Soviet Union.<sup>18</sup> The shock of the launch, which placed the United States behind the Soviets in this race, demanded a reaction. Part of the response was to form the Advanced Research Projects Agency (ARPA), the predecessor to today's Defense Advanced Research Project Agency (DARPA). Senior leaders at DARPA now share the story of Sputnik and strategic surprise as part of DARPA's heritage and genealogy. They still claim responsibility for the creation and prevention of strategic surprise, using technological means.

In addition to introducing strategic surprise into a political narrative, technology can also change dominant societal structures. As Vlahos describes, "old social networks of feudal obligation, serfs with scythes were instantly obsolete against trained and paid soldier companies with trebuchet, arbalest, and high-castled cog."<sup>19</sup> In other words, technology enabled new forms of security organization that granted superior power—in terms of physical instruments of coercion—to those who were willing to adopt them. Kings and princes had a new economic calculation as their ability to enlist unreasoned and unreasonable obedience was diminished vis a vis nationalists who leveraged new technology. Furthermore, young men could join paid soldier companies, which also offered the inducement of prestige.

In the traditional perspective, technology in warfare is about material objective realities. A threat creates a capability gap that can be filled with a technological solution.

---

<sup>17</sup> David N. Spires, *Beyond Horizons: half a century of Air Force space leadership* (Washington, DC: US Government Printing Office, 1998) 25.

<sup>18</sup> Spires, *Beyond Horizons*, 92.

<sup>19</sup> Vlahos, *Fighting Identity*, 20.

From the postmodernist perspective, technology is one element in a narrative that creates a particular sentiment, and helps create the very identity that defines people's political groupings and loyalties. Capability gaps themselves arise from the process of discourse, in which leaders assemble images and metaphors that enable the securitization of particular actions or investments. For instance, President Franklin Roosevelt used the image of a poised rattlesnake to advocate anticipatory self-defense ahead of WWII, saying that you don't wait for a poised rattlesnake to strike before you crush it.

### ***Identity***

Technology plays a significant role in forming identity within the military. For example, Adams notes how the main battle tank is the image of the army. Without tanks, the army is just a large version of the Marine Corps.<sup>20</sup> The identity of the Air Force involves some technological instantiation of airpower. For example, in the decades surrounding World War II, bombers, bomber pilots, and bomber organizations dominated Air Force culture. During the latter half of the Cold War, fighter aviation became dominant. Furthermore, the military tends to spend more creative energy, time, and money on technological development than on doctrinal or organizational adaptation.<sup>21</sup> Whether it is a cause or effect of this culture, the military tends to attract people who are interested in technology.

However, technology changes quickly, and senior leaders can sometimes have difficulty in trying to identify with new technological innovation. Senior military leaders who spent their careers dealing with ship and aircraft technology in the 1970s cannot

---

<sup>20</sup>Thomas Adams, *The Army After Next: The First Postindustrial Army* (Westport, CT: Praeger Security International, 2006) 88.

<sup>21</sup> Adams, *Army After Next*, 13.

identify with electronic warfare as well as they can with kinetic weapons like missiles and bombs. This generational gap helps explain why “traditionally, in times of funding slowdown, electronic warfare is the first thing we cut,” according to Representative Rick Larsen, a Democrat from Washington State and Chairman of the House electronic warfare working group.<sup>22</sup> While electronic and cyber combat may dominate future battles, funding is not keeping pace. Meanwhile, the military is wearing out its electronic warfare assets, particularly in airborne electronic attack, which could lead to a significant electronic warfare capability gap. In this case, a low level of identification with a particular technology can potentially create a material capability gap.

On the other hand, responses to the increasing threat from new technologies—directed energy, information and cyber operations—will help develop a new cultural identity within the armed forces. Some commentators contend that the military must accelerate this generational identity-making process, and strategically position itself to be at the center of important networks. David Brooks argues that the United States has entered the information age in which agriculture and industry are no longer the mainstays.<sup>23</sup> In his view, leaders must anticipate the technology that will matter in future conflict and equip the force appropriately. Former Undersecretary of Defense for Acquisition, Technology, and Logistics Jacques Gansler says the Pentagon must stop buying ships, airplanes, tanks and other twentieth century weapons and shift to intelligence, information, unmanned, anti-missile and networked systems. “An integrated

---

<sup>22</sup> David Fulghum, “Threat Grows, Budgets Shrink, EW Could Be Compromised,” *Aviation Week*. 3 Aug. 2011 online, Internet 17 Dec. 2012. Available: <http://www.aviationweek.com/aw/blogs/defense/index.jsp?plckController=Blog&plckScript=blogScript&plckElementId=blogDest&plckBlogPage=BlogViewPost&plckPostId=Blog%3a27ec4a53-dcc8-42d0-bd3a-01329aef79a7Post%3a579780b5-aed7-4bc6-b362-8cb4042b878d>

<sup>23</sup> David Brooks, “The Crossroads Nation,” *New York Times* 8 Nov. 2010: A21.

[network-centric] system will include distributed sensors and shooters, rather than requiring every weapon to be self-sufficient and therefore extremely complex and expensive,” Gansler says.<sup>24</sup>

This network-centric identity is not lost on the technophilic United States Air Force. Its senior leaders co-opt the narrative power of pop-culture technology. For instance, recognizing the popularity of the iCloud in American culture, Air Force leaders like Commander of Air Combat Command General Hostage have begun to sell the idea of a “combat cloud”:

“Instead of focusing on individual planes, squadrons, or “strike packages” executing a particular mission, the new concept looks at all the deployed aircraft as a whole, linked together by secure wireless networks in the “combat cloud.” Hostage sees the “combat cloud” as essential to the next phase of air combat capabilities. Hostage says “when we come to the evolution of “next generation systems, the form factor [what planes look like on the outside] could stay quite similar as we evolve the capabilities within the planes or in terms of how the flying systems can interact and operate together. Rather than thinking of 6th generation aircraft in form factor terms, we can operate the new air combat cloud and leverage that moving forward. ...It will be as part of the air combat cloud which defines the role of the RPAs, not the other way around.”<sup>25</sup>

Hostage seems to recognize the value of exploiting popular discourse—where it is consistent with institutional culture—to further institutional objectives. As the Air Force continues to justify its investment in the F-35, vaguely positive associations with fashionable trends will probably help.

Tanks, machine guns, airplanes, and many more industrial technologies changed the character of past warfare. Similarly, a number of specific technological fields offer the possibility of revolutionary change in the twenty-first century. Genetics, artificial

---

<sup>24</sup> Fulghum, “Threat Grows, Budgets Shrink, EW Could Be Compromised,” 1.

<sup>25</sup> Robbin Laird and David Deptula, “Why Air Force Needs Lots Of F-35s: Gen. Hostage On The ‘Combat Cloud’” *AOL Defense* 10 Jan. 2013, online, Internet. Available: [defense.aol.com/2013/01/10/why-the-air-force-needs-a-lot-of-f-35s-gen-hostage-on-the-com?\\_a\\_dgi=aolshare\\_twitter](http://defense.aol.com/2013/01/10/why-the-air-force-needs-a-lot-of-f-35s-gen-hostage-on-the-com?_a_dgi=aolshare_twitter).

intelligence, cyberwar, and robotics are four fields that create the potential for a shift from modern, industrial warfare to post-industrial, or postmodern, warfare. For example, advances in cyber technologies create the potential to undermine the geographic state-based global political order, whereas genetic advances potentially enable the possibility of a pre-selected warrior class in a society. However, as subsequent analysis shows, these technologies carry with them the inertia of the modern era.

### **Post-industrial Technologies**

#### ***Genetics***

Similar to the case with the conversation about postmodern warfare in general, the conversation on genetic technology and warfare is somewhat unclear and overinflated. A report from the Counterproliferation and Technology Office at the Defense Intelligence Agency says that “advances in biological research likely will permit development of a new class of advanced biological warfare agents engineered to elicit novel effects.”<sup>26</sup> Barry Bloom, dean of the Harvard School of Public Health, talks of a “post-genomic era” defined by the period in which scientists have access to the genetic sequence of every virulence determinant, every protein antigen, and every drug target.<sup>27</sup> Hessel, Goodman, and Kotler assess technology in the biosciences sector against other novel technologies:

But consider that since the beginning of this century, rapidly accelerating technology has shown a distinct tendency to turn the impossible into the everyday in no time at all. Last year, IBM’s Watson, an artificial intelligence, understood natural language well enough to whip the human champion Ken Jennings on *Jeopardy*. As we write this, soldiers with bionic limbs are returning to active duty, and autonomous cars are driving

---

<sup>26</sup> James B. Petro, Theodore R. Plasse, and Jack A. McNulty, “Biotechnology: Impact on Biological Warfare and Biodefense,” *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 1 (2003): 161-168.

<sup>27</sup> B.R. Bloom, “Genome sequences. A microbial minimalist,” *Nature* 378 (1995): 236.

down our streets. Yet most of these advances are small in comparison with the great leap forward currently under way in the biosciences—a leap with consequences we’ve only begun to imagine.<sup>28</sup>

To be sure, genetic research is prominent. Forty states are engaged in synthetic biology research. In China, for example, the Beijing Genomics Institute, founded in 1999, “is the largest genomic-research organization in the world, sequencing the equivalent of roughly 700,000 human genomes a year.”<sup>29</sup> The logical leap that such research will soon lead to advanced genetically targeted bioweapons, however, deserves a closer look.

Hessel, Goodman, and Kotler argue that humanity is drawing close to the possibility of genetically targeted weaponry. They contend that the enabling technologies are in place in academic research and development groups and commercial biotech firms. They add that these technologies are becoming exponentially more powerful.<sup>30</sup> However, enabling technologies, even when increasing in power, do not necessarily lead to military technological innovation. Instead, such innovation requires a need, an incentive, and the initiative of a heterogeneous engineer.

Even when a need, incentive, and initiative come together to create technological innovation, it may not be adopted as an acceptable change. Its adoption can be hindered by institutional inertia or by characteristics of the technology itself. The “presumptive anomaly” and the “reverse salient” are two terms that were coined to describe characteristics of technology that can hinder its adoption. A presumptive anomaly, a term coined by Constant, describes the situation in which a particular component of a

---

<sup>28</sup> Andrew Hessel, Marc Goodman, Steven Kotler, “Hacking the President’s DNA” *The Atlantic*. (Nov. 2012): 2.

<sup>29</sup> Hessel, “Hacking the President’s DNA,” 10.

<sup>30</sup> Hessel, “Hacking the President’s DNA,” 10.

technology is predicted not to function acceptably in some presumed future environment. For instance, the propeller on an aircraft was considered a presumptive anomaly on aircraft in the 1930's in the case that the future aviation environment involved higher speeds.<sup>31</sup> The reason that the propeller was a presumptive anomaly was that at high velocity the tip of the propeller achieved supersonic speeds, thus creating a shock wave and resulting in supersonic burbling, flight instability, and fatalities. The reverse salient describes any technical aspect of a system that lags behind the rest of the technology in the system, and thus prevents the entire system from being adopted.<sup>32</sup> For example, in hypersonic aircraft development a reverse salient might be metallurgy in the case that materials cannot be developed that can withstand the heat of such speeds, or it might be in jet engines in the case that they cannot ingest sufficient air behind the shock wave.

The reverse salient that hinders technological adoption could even be sociological, in that institutional or societal inertia prevents the useful adaptation of a potentially useful technology. Genetically engineered bioweapons are likely to fall into this category, as the very concept of genetic engineering is poorly understood and often greeted with fear or derision. To weaponize this technology would violate the societal norms of many modern states.

Appropriately, Hessel, Goodman, and Kotler recognized that not all innovation is adopted and useful. They acknowledge a concept called the hype cycle, coined by the information-technology research and advisory firm Gartner. The hype cycle describes

---

<sup>31</sup> Govindan Parayil, *Conceptualizing Technological Change: Theoretical and Empirical Explorations* (Oxford: Rowman & Littlefield Publishers, Inc., 1999), 30.

<sup>32</sup> Wiebe E. Bijker, Thomas P. Hughes, and Trevor Pinch, *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology* (Cambridge: The MIT Press, 1987) 17.

how a new technology is introduced with enthusiasm, but is followed by the trough of disillusionment when the technology does not deliver on its promises.<sup>33</sup>

Similar to the case with the global political structure, the technological *status quo* carries its own inertia that keeps it rooted in the modern era. Twentieth century biological weapons include bacteria and viruses like anthrax and smallpox that require essentially industrial manufacturing processes to produce in scale. Genetic engineering may increase the yield of these processes, but it does not revolutionize biological warfare beyond the industrial age.

Nonetheless, seeds of revolutionary change exist in the realm of genetics. The completion of the sequencing of the entire human genome in 2003 promised advances in medical care and, theoretically, the ability to improve any phenotypic trait—such as memory capacity—through manipulation of the genotype. It would be a revolutionary change for any political group—state or otherwise—to manipulate the phenotype of a subgroup in order to *create* a military class. The primary difference in this paradigm is not the technology itself, however, but rather the implementation in which the military personnel are selected for improvement as a precondition for service.

On the other hand, to manipulate the genetic code of the military class after they have volunteered or been drafted would not be a revolutionary technological change. Instead, it would only be a modification to the method by which the military already strengthens the physical characteristics of its members. For example, the United States military today requires that service men and women undergo vaccinations beyond those required by public health administrators. Anthrax and smallpox vaccines, for instance, are methods for physically building new molecular structures inside a body to strengthen

---

<sup>33</sup> Hessel, “Hacking the President’s DNA,” 3.

it against external threats. Similarly, to use genetic techniques to strengthen soldiers' physical characteristics (like muscular strength) against threats would not be a revolutionary change.

Whereas the potential to genetically engineer a military class represents a seed of revolutionary change in civil-military relations, stealth bioweapons offer a seed of revolutionary change in the global political structure. Steven Block of the Princeton University molecular biology department has reported a study of "Biological Threats Enabled by Molecular Biology" that considered the possibility of stealth viruses that could be introduced covertly into the genomes of a given population and then triggered later by a signal. "The ability to tag the genome of a given population and attack it at will, or to produce an entirely new pathogen, clearly represents an order-of-magnitude change in capabilities."<sup>34</sup> The revolutionary change is not necessarily the technology itself, but rather the ability to group and target people via genetic code instead of physical location.

However, there exist two limiters to the revolutionary nature of such a technological innovation. First, the stealth virus would still depend, to some degree, upon physical geographic location. The reason is that biological viruses are physical entities that are required to traverse space to infect their victim. They are introduced locally and are communicable across great distances only through travel. Second, genetic targeting would not be anything close to precise. Fraser and Dando elaborate:

Some argue that the availability of the human genome sequence will facilitate the development of biowarfare agents targeted to specific ethnic

---

<sup>34</sup> Claire M. Fraser, Malcolm R. Dando, "Genomics and future biological weapons: the need for preventive action by the biomedical community," *Nature Genetics* 22 Oct. 2001 online, Internet 17 Dec. 2012. Available: : [cmbi.bjmu.edu.cn/201/insight-anthrax/feature/Genomics%20and%20future%20biological%20weapons.pdf](http://cmbi.bjmu.edu.cn/201/insight-anthrax/feature/Genomics%20and%20future%20biological%20weapons.pdf). Accessed 12/18/12.

groups or individuals. Although this may not be impossible, for a number of reasons it seems extremely unlikely. Though genetic susceptibility to infectious disease has been described, the reductionist view that the human genetic code is the sole determinant of disease susceptibility is unsubstantiated. Analysis of the human genome sequence to date has failed to reveal any polymorphisms that can be used to absolutely define racial groups. In fact genetic diversity in human populations is low relative to other species<sup>35</sup>

Due to these characteristics of genetic weaponization, revolutionary bioweapons are more of an early part of the hype cycle than they are a promising revolutionary postmodern military technology.

Despite these seeds of revolutionary change, advances in genetic sciences are unlikely to foster a postmodern warfare revolution. They are more likely to be adopted into existing paradigms. For instance, genetic information could become a tool for screening applicants to the military class, and excluding those who carry the code for a debilitating and life threatening disease. Such an implementation would be a cost-saving measure, as citizens would not want their government to invest heavily in the training and education of an individual if that person will not live to make use of such training in continued public service. Another example of adoption of novel genetic technology into existing paradigms is the manipulation of the genetic code of crops in order to increase their yield to better feed the population.

Like many other modern technologies, the more questions scientists answer, the more questions arise. For example, the sequencing of the human genome promised to reveal the definitive blueprint of man: the approximately 25,000 genes that code for proteins. However, these genes form only about three percent of the base pairs in the genetic code. The other 97 percent was thought to be junk DNA until recent studies

---

<sup>35</sup> Fraser, "Genomics and future biological weapons," 4.

revealed that so-called junk DNA is not junk at all, but rather plays a role in the switching and regulation of the coding regions.<sup>36</sup> As such, advances in genetic technology unlock new puzzles for scientists to try to solve, but they do not automatically lead to a postmodern or postindustrial implementation.

### ***Artificial Intelligence***

Like genetics, the technology of artificial intelligence invites excitement and hype. The above description of Watson's performance on Jeopardy is one such example. The author writes that Watson understood natural language so well as to whip a human champion on the game show. A separate assessment hails

It may be hard to believe, but before the end of this century, 70 percent of today's occupations will likewise be replaced by automation. Yes, dear reader, even you will have your job taken away by machines. In other words, robot replacement is just a matter of time. This upheaval is being led by a second wave of automation, one that is centered on artificial cognition, cheap sensors, machine learning, and distributed smarts.<sup>37</sup>

The author describes this automation as part of a "postindustrial economy." To be sure, artificial intelligence systems currently outperform human beings on a number of tasks, including games of strategy like chess.<sup>38</sup>

However, glowing assessments and prognostications like the ones above fail to frame the technology in the broader context of intelligence. The human Jeopardy champion, Ken Jennings, can interact with the teller at a bank, the voice at the other end of a drive through, or Alex Trebek equally well. On the other hand, Watson's understanding of natural language outside the setting of the game show for which he was

---

<sup>36</sup> Stephen S. Hall, "Hidden Treasures in Junk DNA," *Scientific American* (Oct. 2012): 23.

<sup>37</sup> Kevin Kelly, "Better Than Human: Why Robots Will - And Must - Take Our Jobs" *Wired* 24 Dec. 2012, online, Internet 9 Jan. 2013. Available: <http://www.wired.com/gadgetlab/2012/12/ff-robots-will-take-our-jobs/>

<sup>38</sup> Jonathan Schaeffer, et al. "Checkers is Solved," *Science* 317.5844 (2007): 1518.

programmed would likely prove nearly useless. In other words, Watson would fail the Turing test. Although he was programmed to be able to answer some questions from a game show host, Watson is almost certainly unable to converse meaningfully with people outside of his predetermined environment. On the other side of the coin, if Ken Jennings had focused (like Watson) singularly on the task of winning *Jeopardy*, to the exclusion of everything else over the course of 15 years with the dedicated help of a team of dozens of scientists, the outcome of his competition with the computer likely would have been different.

A compendium of scientists defined intelligence as the general mental capability that “reflects a broader and deeper capability for comprehending our surroundings—“catching on,” “making sense” of things, or “figuring out” what to do.”<sup>39</sup> Roger Schank, author of *Tell Me A Story: Narrative and Intelligence*, provides a more postmodern, narrative-based assessment. To him, intelligence is about telling appropriate stories. In telling stories, people are just recognizing in other peoples’ stories indices to their own beliefs with which they can then recall their own stories that share the same set of beliefs.<sup>40</sup> Stanford University’s definition of artificial intelligence demonstrates a marked step down from these definitions of human intelligence: it is simply “the ability to perceive something complex and make appropriate decisions.”<sup>41</sup> Human intelligence is about much more than appropriate decisions. It involves establishing the notion of appropriateness itself. It involves a nearly infinite collection of theories to explain, categorize, simplify, and anticipate complex phenomena.

---

<sup>39</sup> L.S. Gottfredson “Intelligence and social policy,” *Intelligence* 24.1 (1997): 1.

<sup>40</sup> Roger C. Schank, *Tell Me A Story: Narrative and Intelligence*. (Evanston, Illinois: Northwestern UP, 1990) 72.

<sup>41</sup> Schank, *Tell Me A Story*, 77.

Overinflated assessments of the current state of artificial intelligence technology fail to clearly define what intelligence means. They can also be internally inconsistent or illogical. For example, Kevin Kelly, the author of the Wired Magazine quote above says

We have preconceptions about how an intelligent robot should look and act, and these can blind us to what is already happening around us. To demand that artificial intelligence be humanlike is the same flawed logic as demanding that artificial flying be birdlike, with flapping wings. Robots will think different. To see how far artificial intelligence has penetrated our lives, we need to shed the idea that they will be humanlike.

But then he continues,

Here's why we're at the inflection point: Machines are acquiring smarts. We already have artificial intelligence in many of our machines; we just don't call it that. Witness one piece of software by Narrative Science (profiled in issue 20.05) that can write newspaper stories about sports games directly from the games' stats or generate a synopsis of a company's stock performance each day from bits of text around the web.<sup>42</sup>

The author is not being logically consistent. To use the words intelligence and smarts without defining them, and then to talk about the human-like tasks that artificial intelligence software does is to compare these systems to humans. This type of discourse does not help anyone “shed the idea that they will be humanlike.” Instead of publishing such excited, inconsistent appraisals of technology, he and many other technophiles should print precise but digestible descriptions of the algorithms that piece together news stories. If they want to draw the narrative away from the human-like qualities of software systems, they must quit using words like artificial intelligence and smarts in these contexts.

Furthermore, if computers were programmed to cogitate like intelligent humans—to perceive novel stimuli according to a pre-existing set of beliefs, and to occasionally modify those beliefs to account for new stimuli—they would be considered flawed or out

---

<sup>42</sup> Kelly, “Better than Human,” 1.

of control. The dominant paradigm in computer programming is to ensure the program does what it is programmed to do. This paradigm requires a predefinition of the set of stimuli the program will perceive. An environmental stimulus that does not fit the existing protocol is not computed at all. On the other hand, humans perceive novel stimuli almost every day of their lives, and perceive it by fitting it into a categorical set of beliefs that change over time.

Thus, the status quo of modern artificial intelligence is essentially industrial, as the computer programming paradigm requires a large number of people and a great deal of time to define the set of stimuli to be processed, the protocol for processing and communicating such information, the conditions for machine learning, and nearly all other aspects related to intelligence in machines.

Nonetheless, some very young, fragile seeds of revolutionary change toward post-industrialism exist in the field of artificial intelligence. At the Defense Advanced Research Projects Agency, Dr. Todd Hylton, a quietly brilliant program manager recently finished up a tour running two such seeds. One, called Physical Intelligence, seeks to “demonstrate the first human-engineered open thermodynamic systems that spontaneously evolve nontrivial intelligent behavior under thermodynamic pressure from their environment.”<sup>43</sup> The other, known as SyNAPSE, or Systems of Neuromorphic Adaptive Plastic Scalable Electronics, aimed to revolutionize computer architecture toward emulation of a human brain. On their website, the Defense Sciences Office states:

Current programmable machines are limited not only by their computational capacity, but also by an architecture requiring human-derived algorithms to describe and process information from their environment. In contrast, biological neural systems, such as a brain,

---

<sup>43</sup> DARPA Defense Sciences Office, “Physical Intelligence,” *darpa.mil* 21 Dec. 2012 online, Internet. Available: [http://www.darpa.mil/Our\\_Work/DSO/Programs/Physical\\_Intelligence.aspx](http://www.darpa.mil/Our_Work/DSO/Programs/Physical_Intelligence.aspx)

autonomously process information in complex environments by automatically learning relevant and probabilistically stable features and associations. Since real-world problems generally have many variables and nearly infinite combinational complexity, neuromorphic electronic machines would be preferable in a host of applications. Useful and practical implementations, however, do not yet exist.<sup>44</sup>

The most profound demonstration of the state of this technology is the simulated implementation of a human visual cortex using an IBM Golden Gate Chip, the first computer chip to use this revolutionary architecture. This development, created by graduate students and faculty at the University of Wisconsin, shows how such an architecture can be used to see an object flying through the sky, determine what the object is, make predictions about its behavior, and even assume the object is still present when it is completely obscured by other objects in the scene. The revolutionary attributes of this implementation involve the ability to classify ambiguous information into to pre-existing beliefs and to make assumptions using information that is no longer observable. These attributes are not unique to such advanced architectures, and could even be programmed into existing computer systems.

However, the growth of these seeds over the next decade is likely to prove to be like the magic beans in the story of Jack and the beanstalk: fictional. The reason is not in the technology itself, nor in the management of such programs. These programs will be constrained by the increasingly austere fiscal environment in the wake of the global financial crisis of 2008. Additionally, they offer the possibility of truly revolutionary change, and their implementation will therefore meet strong societal resistance.

---

<sup>44</sup> DARPA Defense Sciences Office, "Systems of Neuromorphic Adaptive Plastic Scalable Electronics (SYNAPSE)," 21 Dec. 2012 online, Internet. Available: [http://www.darpa.mil/Our\\_Work/DSO/Programs/Systems\\_of\\_Neuromorphic\\_Adaptive\\_Plastic\\_Scalable\\_Electronics\\_\(SYNAPSE\).aspx](http://www.darpa.mil/Our_Work/DSO/Programs/Systems_of_Neuromorphic_Adaptive_Plastic_Scalable_Electronics_(SYNAPSE).aspx)

Due to the fact that these technologies are so young, Hughes' concept of *technological momentum* helps explain the future path of artificial intelligence technologies. Technological momentum describes how technologies interact with society to help shape each other. Young technologies are more easily explained through social constructivist theories than technological determinist ones. As the technology matures—in the case of Intercontinental Ballistic Missiles (ICBMs) during the Cold War, for instance—the explanatory power of the competing theories is reversed, and the technology plays a larger role in shaping society.<sup>45</sup> Considering the concept of technological momentum, the most profitable time to steer the course of maturing technologies is during their infancy. Therefore, the youth of revolutionary artificial intelligence paradigms demand the US government remain intimately involved in exploring their potential security applications.

The fusion software that makes up the brains of the F-35 serves as an interesting case-study of the state of artificial intelligence technologies being deployed in the most advanced fighter aircraft on Earth. Fusion is the set of software processes and codes that amalgamate disparate information that the aircraft's sensors collect. Fusion decides what information to present to the pilot, what electronic countermeasures to employ, and what information to share with other aircraft. The architect behind fusion is a man named Dr. Tom Fry. Dr. Fry is a Texas native and a Fellow at the Lockheed Martin Corporation. He worked for General Dynamics before Lockheed bought it, and was an integral part of fusion development in the Advanced Tactical Demonstration (ATD) project that grew up to become the F-22 *Raptor*. ATD was a joint Boeing, General Dynamics, Northrop

---

<sup>45</sup> Thomas P. Hughes, "Technological Momentum," *Does Technology Drive History? The Dilemma of Technological Determinism*, eds Smith and Marx (Cambridge: The MIT Press, 1994).

Grumman, Lockheed Martin project. Some people think of Dr. Fry as more of a theorist than a programmer, and from 2004—as the F-35 fusion lead—he drew the boundaries for software engineers trying to write the code.

The protocol for sharing fusion information with other F-35s is called Multi-ship Advanced Data Link (MADL). Lockheed Martin employee Toby Prescott and Northrop Grumman's John Kraemer, along with their former colleague Larry Collier, are the fathers of MADL. John, a native of upstate New York, is the Interoperability Lead at Northrop Grumman. He is a short, smiling man adorned with a gray mustache and pony tail fit for a Harley Davidson. A very good natured man, he acts in movies as a hobby. For example, he says, he made \$5.80 in royalties for a role in a television show, and he acted in the film *Gods Army*. "If you're Mormon you were required to see it," he explains when greeted with a blank look. As a young man he thought about attending the US Air Force Academy, but decided instead to enlist for a few years. While in the service, he worked on a few black projects for the B-2 bomber program, but he still wonders aloud if he should have gone to the Academy. Toby Prescott, the waveform lead for MADL, grew up in Los Angeles. San Diego is the furthest East he has ever lived. He is much taller than his friend John, and he enjoys teasing stories out of his buddy in between jokes and stories of his own. His casual conversation, smiles, and polo shirt only betray for a second his bright engineering capability. These two are not who you think of as designers of the advanced data-link for the most advanced fighter technology ever.

Nor is MADL anything revolutionary. It is an evolutionary, warfare-tailored, low observable method of sharing digital information. John describes the function of MADL

using a story about a night when he was sitting in Wendy's with his back to the waitress. He was dining with a group of women, and his long gray ponytail made it appear, from the back, that it was ladies' night out. The waitress walked up from behind him and said "what would you ladies like?" When she took one more step and could then see his long gray mustache, she immediately recognized she had made an incorrect conclusion using some ambiguous information. He says if there had been another waitress looking at him from the front she could have told the waitress "hey, it's a guy," before she made an incorrect assumption. "That's what MADL does, just share information," John and Toby agree. It does not think, it simply uses multiple sensors to communicate a variety of information and try to resolve ambiguities.<sup>46</sup>

This is the reality of artificial intelligence like Watson, fusion, and MADL. It is evolutionary technology built to fit into modern paradigms. It is not nearly as magical and revolutionary as popular stories would have us believe.

### ***Cyberwar***

Another technology that earns tremendous attention and hype today is cyberspace. Like airpower at the turn of the twentieth century, prognosticators tend to see a future of warfare that takes place entirely in and through a new domain. Krepinevich, for example, writes that the greatest threat in the twenty-first century will be from a massive cyberattack.

The greatest danger of a catastrophic attack on the US homeland will likely come not from nuclear-armed missiles, but from cyberattacks conducted at the speed of light. The United States, which has an advanced civilian cyberinfrastructure but prohibits its military from defending it, will prove a highly attractive target, particularly given that the processes for attributing attacks to their perpetrators are neither swift nor foolproof.

---

<sup>46</sup> John Kraemer and Toby Prescott. Personal Interview. 8 Nov. 2012.

Foreign powers may already have prepositioned “logic bombs”—computer code inserted surreptitiously to trigger a future malicious effect—in the US power grid, potentially enabling them to trigger a prolonged and massive future blackout.<sup>47</sup>

Likewise, Google executive Eric Schmidt says in his new book that China is the world’s “most sophisticated and prolific” hacker. “It’s fair to say we’re already living in an age of state-led cyberwar, even if most of us aren’t aware of it,” he states. He has personal experience in this arena, as China hacked Google in 2010.<sup>48</sup>

Public policymakers also see a future of cyberwarfare, based on evidence from current events. Director of National Intelligence James Clapper said in testimony to congress “we all recognize (cyberattacks) as a profound threat to this country, to its future, to its economy, to its very being.”<sup>49</sup> Secretary of Defense Leon Panetta asserted that the Shamoon computer virus—that destroyed 30,000 computers at the Saudi oil company Aramco—was “probably the most destructive attack that the private sector has seen to date.”<sup>50</sup> McAfee labs warned of a massive fraud attack on 30 US banks in early 2013, based on a threat named Project Blitzkrieg, which skimmed more than \$5 Million from banks including the Bank of America and JP Morgan Chase by using software that mimics valid banking transactions and intercepts tracking emails that consumers use to flag suspicious activity.<sup>51</sup> Grounded by some level of analysis of these events, the US Secretary of Defense assesses that the internet is a “new terrain for warfare...a battlefield of the future.”<sup>52</sup>

---

<sup>47</sup> Andrew Krepinevich, “Democratizing Destruction,” *Foreignpolicy.com* 7 May 2012 online, Internet. Available:

[http://www.foreignpolicy.com/articles/2011/08/15/get\\_ready\\_for\\_the\\_democratization\\_of\\_destruction](http://www.foreignpolicy.com/articles/2011/08/15/get_ready_for_the_democratization_of_destruction).

<sup>48</sup> Ellen Nakashima, “Cyber-spying said to target U.S. business,” *Washington Post* 11 Feb. 2013: A1+.

<sup>49</sup> Joseph I Lieberman, “Protecting against a ‘cyber 9/11’,” *Washington Post* 10 Oct. 2012: A21.

<sup>50</sup> Walter Pincus, “The inevitable blowback to high-tech warfare,” *Washington Post*, 15 Oct. 2012: A19.

<sup>51</sup> Hayley Tsukayama, “Report warns of cyber threat to U.S. banks,” *Washington Post* 13 Dec. 2012: A15.

<sup>52</sup> Pincus, “The inevitable blowback to high-tech warfare,” A19.

Cyberwarfare is not necessarily raging, but certainly evidence points to elements of conflict in the newly exploitable medium. At present, conflict in cyberspace manifests itself primarily in the form of espionage. For example, Kaspersky labs released a report that a malware called Rocra, apparently written by Russian speakers using a Chinese exploit code, has been stealing encrypted files and decryption keys used by EU and NATO for the last five years. The malware can help map out the internal layout of a computer network and the configuration of routers. It can also hijack files from thumb drives and smartphones.<sup>53</sup> In another example, Security firm Mandiant traced 141 thefts of online data to a single Chinese military unit it calls Advanced Persistent Threat 1 (APT1). APT1 is otherwise known as unit 61398 in the 2<sup>nd</sup> Bureau of the People's Liberation Army's General Staff, 3<sup>rd</sup> Department. Of these 141 thefts, 115 of the targets were located in the United States. Some targets were government agencies, others were NGOs. The unit responsible, according to the reports, operates out of a twelve-story building on the outskirts of Shanghai.<sup>54</sup>

Cyberspace and cyber-conflict themselves are not postmodern. To be sure, recent technological developments such as the internet and global positioning satellites make the electromagnetic spectrum exploitable for political purposes, including war. Like the birth of airpower in the early 1900s, dominant political groups can invest in the technology that allows them to enter this new domain, do something useful, and get out. However, neither airpower nor cyberpower change the nature of warfare in the modern era: states coercing other states to abide by their will.

---

<sup>53</sup> Ellen Nakashima, "Malware targets European agencies," *Washington Post* 15 Jan. 2013: A3.

<sup>54</sup> William Wan and Ellen Nakashima, "Chinese cyberspying hits more than 140 targets, report says," *Washington Post* 20 Feb. 2013: A8.

Cyberspace, however, contains the seeds of revolutionary change. For instance, Krepinevich's *Foreign Policy* article describes how new technologies in the cyber realm offer increasingly destructive power to smaller groups, a trend he terms "democratizing destruction." This attribute of cyber-technology—the potential to change the form of dominant political groups—is postmodern. One physical manifestation of this potential democratization of destruction is three-dimensional printers. At a minimum, analyst Carl Howe says "this is the democratization of manufacturing." A simple YouTube video presents an example of the potential transmogrification of 3D printing technology into weapons manufacturing. In his video, University of Texas law student—and head of the nonprofit firm Defense Distributed—Cody Wilson explains how to print a "Wiki Weapon." 3D printing technology can be purchased for a mere \$1,500. The ultimate result of the proliferation of this type of technology is that wherever there is a computer there is a potential weapon.<sup>55</sup>

Nonetheless, even this type of military capability—rapidly distributable across geographic and political boundaries—is restrained within some industrial limitations. Namely, anyone who is prepared to print a weapon in their 3D printer must have sufficient ink with which to print it. Furthermore, they must have acquired the 3D printer through industrial logistical methods. Modern governments can intercede to prevent the delivery of the printers or their ink technology, and thus limit the efficacy of this type of cyber-weaponry.

New communications technologies like cell phones and smart phones also change the relative importance of physical geography, albeit within the modern state system. In one example, *New York Times* blogger Andrew Revkin looked at the explosive rate of

---

<sup>55</sup> Cecelia Kang "3-D printers could make your desk a factory," *Washington Post*, 8Jan. 2013: A1.

cell phone ownership in developing countries when he wrote “in coordinating mass action, and then communicating it to others, both inside and outside of Egypt, I can’t imagine any factor being more influential than ...the explosive growth in the use of mobile phones in developing countries.”<sup>56</sup> People can use cyber technologies to coordinate discussion and mass action, the ingredients of revolutionary politics, almost regardless of their physical location.

Meanwhile, whether the seeds of revolutionary change germinate into a postmodern form of global politics or not, technology has undoubtedly changed the structure of the United States military. In *The American Way of War* Weigley describes how American society entrusted the Navy with providing the first line of defense from foreign threats during the nineteenth century.<sup>57</sup> Then, early in the life of airpower, Army Air Corps Brigadier General Billy Mitchell sacrificed his career to advocate for an independent Air Force to provide the first line of national defense. The National Security Act of 1947 created the United States Air Force.

Similarly, the establishment of United States Cyber Command in 2010 created a formal structure to focus on the first line of defense in cyberspace. In late January of 2013 the Pentagon approved Cyber Command’s request to increase the size of his organization from 900 to 4900 troops and civilians. The Cyber Command plan called for the creation of three types of forces: *national mission forces* to protect computer systems that support infrastructure like electrical grids; *combat mission forces* to help support operations and to engage in offensive cyber operations; and *cyber protection forces* to

---

<sup>56</sup> Andrew Revkin, “Explaining Egypt,” *New York Times Dot Earth* 1 Feb. 2011 online, Internet. Available: <http://dotearth.blogs.nytimes.com/2011/02/01/explaining-egypt/>

<sup>57</sup> Russell Weigley, *The American Way of War: A History of United States Military Strategy and Policy*. (New York: Macmillan Publishing Company, Inc., 1973) 60.

fortify DOD networks.<sup>58</sup> Such a move by the US Government provides an important buffer against postmodern developments because it ensures the modern state will continue to provide the first line of defense in the cyber domain.

Absent such a reorganization, the possibility remained open that entities other than the state might become the trusted national defenders against cyberthreats. For instance, companies with vast capital resources like Google may have created—out of self-interest—effective methods and sub-organizations to defend against cyberattacks. In the absence of government investment, these private methods and organizational structures could become what people trust as their first line of defense against perceived threats. Although in today’s milieu the possibility seems remote, if large portions of the population became subject to cyberattack, they may have withdrawn their personal wealth from banks and instead entrusted it to Google’s proven methods. A significant reallocation of the world’s wealth—or trust, which is what money ultimately represents—could have granted Google an unprecedented degree of political power and the ability to invest in the physical instruments of coercion for the future.

Despite the changing means and danger of attack wrought by the exploitation of cyberspace, cyber-defenses remain firmly rooted in the modern era. The story that has unfolded in this regard over the past few years highlights this fact. Specifically, these defenses depend entirely on a modern set of institutions, norms, and timelines to accomplish anything. For example, Cyber Command—a unified command subordinate to the United States Strategic Command—reached initial operational capability in May

---

<sup>58</sup> Ellen Nakashima, “Pentagon to build up its cybersecurity force,” *Washington Post* 28 Jan. 2013: A1.

2010. It was declared fully operationally capable in October of the same year, and sought the authority to mount the full spectrum of operations in cyberspace one month later.<sup>59</sup>

Also, the narrative that describes threats in the cyber-domain remains state-centered. One example comes from a report by the United States-China Economic and Security Review Commission. The report noted that the service provider IDC China Telecommunication broadcast inaccurate Web traffic routes for about 18 minutes on April 8, 2010. That information was then retransmitted by China's state-owned China Telecommunications, effectively forcing data from the United States and other countries to pass through Chinese computer servers. The report said the move affected data traveling over both the government and military networks of the United States, including information from the Senate, the Army, the Navy, the Marine Corps, the Air Force, the Secretary of Defense's office, NASA, the Department of Commerce and the National Oceanic and Atmospheric Administration, as well as from many American companies. There was speculation that the rerouting might have been a test of a cyberweapon that could be used to disrupt the Internet during a crisis or a war. However, there has been no evidence presented to support this theory, and Chinese technical experts rejected the suggestion that the routing changes were intentional. "The Web information flow is controlled by the US, while China just holds a branch line of the global traffic," Lu Benfu, director of the Internet Development Research Center at the Chinese Academy of Sciences, said on the Web site of *Global Times*, a state-run newspaper. "So this kind of accusation is technically unfeasible."<sup>60</sup> The important piece of information resident in

---

<sup>59</sup> Ellen Nakashima, "Pentagon is debating cyber-attacks" *Washington Post* 5 Nov. 2010: A10.

<sup>60</sup> John Markoff, "Report Looks at How China Meddled With the Internet," *New York Times*, 17 Nov. 2010: A1.

the report is not the state of the technology, but rather the central importance of the state to the whole narrative.

Furthermore, leaders are actively seeking international norms to guide state behavior in cyberspace. Essentially this influence amounts to an effort to ensure that a new technology plays by the rules of a global political structure based in anarchy among states. Specifically, Richard Clarke, special advisor to the President during the George W. Bush administration, says “strikingly little has been done to create international norms of behavior in cyberspace and the means to punish those who would deviate from them.”<sup>61</sup> This type of behavior is analogous to the building of cognitive frameworks for thinking about space in the 1950s. The ability to enter and exploit outer space at the start of the Cold War led to a diplomatic battle between the United States and the Soviet Union over how to think about this new domain. Was it more like the sea—a global commons—or more like airspace—sovereign territory? Either framework presupposed the sanctity of the state as the primary political unit. The 2013 publication of the *Tallinn Manual on the International Law Applicable to Cyber Warfare* more formally institutionalized state-centered understandings of force application in cyberspace.<sup>62</sup> In a speech in September, 2012, US State Department Legal Adviser Harold Koh promulgated a US cyberspace policy that echoed a draft of the *Tallinn Manual* that had circulated during the previous two weeks.<sup>63</sup>

---

<sup>61</sup> Richard A. Clarke, “Stop ignoring the online thieves,” *Washington Post* 8 Feb. 2013: A17.

<sup>62</sup> Michael N. Schmitt, *Tallinn Manual on the International Law Applicable to Cyber Warfare* (New York: Cambridge UP, 2013) 1.

<sup>63</sup> Michael N. Schmitt, “International Law in Cyberspace: The Koh Speech and Tallinn Manual Juxtaposed,” *Harvard International Law Journal* 54, Dec. 2012. Online, Internet 24 Apr. 2013. Available: [http://www.harvardilj.org/wp-content/uploads/2012/12/HILJ-Online\\_54\\_Schmitt.pdf](http://www.harvardilj.org/wp-content/uploads/2012/12/HILJ-Online_54_Schmitt.pdf)

Nonetheless, many people visualize something postmodern in the technology itself. Observers see the possibility of a quick and painless way to end wars, much like Douhet viewed the possibilities of airpower in the early 1900s. Such sanguine assessments are akin to Carnot's declaration of the end of strategy, in which enemies would be overwhelmed by sheer power of will.<sup>64</sup> One such story line, for example, suggests that online blogs and social media opinions touting American-style freedom and democracy will persuade Chinese youth to eventually change their form of government.<sup>65</sup> A democratized and representative China, the argument goes, would indicate that the United States had defeated the enemy before the battle ensued. In the wisdom of Sun Tzu, this approach represents the holy grail of strategy.

Cyber-strategy is more likely to arise from less ethereal goals, however, such as the need to safeguard the internet from malicious attacks. One interesting new development in cyber security emanates, again, from DARPA. DARPA unveiled a new program in January 2013 called the Cyber Targeted-Attack Analyzer. The new program "relies on a new approach to security, seeking to quickly understand the interconnections of the systems within a network without a human having to direct it,"<sup>66</sup> according to program manager Richard Guidorizzi. It will "attempt to automatically correlate all of a network's disparate data sources—even those that are as large and complex as those within the DOD—to understand how information is connected as the network grows, shifts and changes."<sup>67</sup> The program manager anticipates that an understanding of the

---

<sup>64</sup> Dolman, *Warrior State*, 115.

<sup>65</sup> National Intelligence Council, "Global Trends 2030: Alternative Worlds," *DNI.gov* Dec. 2012. Online, Internet 21 Jan. 2013. Available: [www.dni.gov/nic/globetrends](http://www.dni.gov/nic/globetrends).

<sup>66</sup> DARPA, "Using connections to stay ahead of the cyber threat," *DARPA.mil* 22 Jan. 2013, online, Internet 24 Jan 2013. Available: <http://www.darpa.mil/NewsEvents/Releases/2013/01/22.aspx>

<sup>67</sup> DARPA, "Using connections to stay ahead of the cyber threat," 1.

digital terrain will enable cyber defenders to quickly discover attacks hidden in normal activities. These developments are no more postmodern than was the need to detect incoming aircraft beyond visual range in World War II. Then, as now, the means and danger of attack changed with the coercive exploitation of a particular domain.

The shifting means and danger of attack in the early part of the twenty-first century suggest a greater state investment in cyber defense capabilities relative to conventional military power. However, to maximize defense, this new threat environment must not be used to undermine investment in materiel that can destroy an adversary's capability to wage war through other domains and more conventional modes of violence. More importantly, the United States must invest in cyber warfare capabilities to defend the modern, state-centric system itself from change.

### ***Robots and Drones***

Robots and drones are the fourth sector of new technology that invites excitable assessments proclaiming a new way of warfare. Singer, in his book *Wired for War: The Robotics Revolution and Conflict in the 21st Century*, declares that machines are “not yet” making command decisions in war, but are increasingly influencing them.<sup>68</sup> His narrative makes it seem as if the state of technology today is right on the verge of autonomous robot warfare. He points to the multiple companies that sell robots to the US Department of Defense, including iRobot and Foster-Miller, which was bought by a private partnership between the Carlyle Group and the British Defense Evaluation and Research Agency (DERA). He highlights the one-thousand-plus robotic systems

---

<sup>68</sup> P. W. Singer, *Wired for War: The Robotics Revolution and Conflict in the 21st Century* (New York: The Penguin Press, 2009) 359.

currently in use or in some stage of research and development.<sup>69</sup> He also makes reference to the US Army Research Laboratory's robotics program office and the Pentagon's joint robotics program.<sup>70</sup>

Despite his quixotic, intriguing, and perhaps misleading linkages, Singer appropriately takes the time to define what he means by "robots." This approach in itself is an unusual step in Singer's technophilic genre. His definition carries three components: robots sense; robots think; robots act. They do so with sensors, artificial intelligence, and effectors.<sup>71</sup> Interestingly, he equates computer processors with artificial intelligence, which falls completely into the wrong paradigm. A proper understanding of this distinction between artificial intelligence and processors is critical.

None of the robotic systems that Singer describes in his book are actually thinking systems that can apply existing theories to new data, or establish and test new theories, or apply old theories to different environments. Instead, all of the robotic systems currently under development process a pre-defined set of inputs according to a pre-defined algorithm in a limited set of environmental conditions to perform one of a predetermined set of functions. Instead of sense-think-act, a more accurate (though far less sensational and noteworthy) definition of the current state of robotics in warfare is sense-process-act. Robots and computers do only what they are programmed to do, and no more.

Another example of this misattribution of "thinking" and revolutionary ability to robots is the story of Baxter, a product of Rethink Robotics. Kelly, the *Wired* reporter introduced above, says Baxter is revolutionary because it indicates where it is looking by

---

<sup>69</sup> Singer, *Wired for War*, 32.

<sup>70</sup> Singer, *Wired for War*, 110.

<sup>71</sup> Singer, *Wired for War*, 67.

shifting the cartoon eyes on its head, and because it is cheap. It is also revolutionary, in his view, because anyone can train Baxter, thanks to the robot's superior "smarts."

To train the bot you simply grab its arms and guide them in the correct motions and sequence. It's a kind of "watch me do this" routine. Baxter learns the procedure and then repeats it. Any worker is capable of this show-and-tell; you don't even have to be literate. Previous workbots required highly educated engineers and crack programmers to write thousands of lines of code (and then debug them) in order to instruct the robot in the simplest change of task.<sup>72</sup>

None of this is revolutionary. The claim that "anyone can train Baxter" simply by moving the robot's arms in the desired pattern of motion really means the programming interface is motion itself rather than a coded language. Baxter does not learn, it is not smart, and it does not have artificial intelligence, because it does not reason, theorize, or figure things out. It is, however, easily programmable through the language of motion.

There exists today scant evidence of postmodern seeds of revolutionary change in robotic warfare. To no extent whatsoever do robots in warfare today make decisions, hold beliefs, create theories, learn, make assumptions, decide what sensory information to filter out as noise, or make value judgments. Instead, each of these parameters is pre-programmed. Evidence of seeds of revolutionary change must suggest that computers have begun to program themselves in a manner contrary to the designs they had been given, and that such an advance was acceptable to the humans who had engineered them. A truly thinking robotic system would be a postmodern revolutionary change. It would call into question both Cartesian dualism—the distinction between body and mind—and modern monism—the action-reaction mechanism that is otherwise postulated to give rise to complex human behavior.

---

<sup>72</sup> Kelly, "Better than Human," 1.

Like robots, drones fall into this hype cycle as well. The depiction of remotely piloted aircraft (RPAs) in the popular press rarely calls to mind the large number of human beings that are required to operate them. Instead, the very words that frame the narrative, such as “drones” and “unmanned aerial vehicles” make it seem as if a high technology system is out on its own, taking in sensory information, thinking, and taking action autonomously. In reality, RPAs require more people than traditionally piloted aircraft. For example, each *Predator* is operated by a pilot and a sensor operator at all times, and an additional crew is required to ensure the communications technology is up and running between the remote pilot and the aircraft. Additional personnel operate the aircraft during takeoff and landing.

One example of how technology might create postmodern warfare—when postmodern warfare is imprecisely defined—involves RPAs and “permanent war.” If postmodern warfare is conceived to be a political situation in which mankind is permanently at war, then RPAs might arguably enable that state of affairs. As Greg Miller notes of the current administration and its use of drone technology, “Obama has institutionalized the highly classified process of targeted killing, transforming *ad-hoc* elements into a counterterrorism infrastructure capable of sustaining a seemingly permanent war.”<sup>73</sup> However, “permanent war” is not an element of a precise definition of postmodern warfare. Postmodern warfare is discourse-centered, post-national, and post-industrial.

One legitimate seed of revolutionary change evident in the proliferation of remotely piloted aircraft and robot technology is the continued democratization of

---

<sup>73</sup> Greg Miller, “US set to keep kill lists for years,” *Washington Post* 24 Oct. 2012: A1.

destruction.<sup>74</sup> Like Krepenovich's assessment of cyber and bioscience technology, robotics offer the potential of increased destructive power to smaller groups. Specifically, robots and RPAs can be mass-produced and employed by a relatively small, geographically distributed group of people. This technology makes possible novel distributions of power among groups that differ from the traditional state. For example, at the confluence of technology and post-nationalism lies the example of the UN deployment of RPAs to regions of Africa for peacekeeping missions. Specifically, in early 2013 the UN Department of Peacekeeping notified Congo, Rwanda, and Uganda that it planned to deploy a unit of at least three RPAs to the eastern region of Congo. Additionally, at the same time Ireland, France, and Belgium supplied RPAs to UN-backed, European led missions in Chad, Lebanon, and the Congo.<sup>75</sup> This example of a non-state actor employing technology amidst violent conflicts shows a potential seed of postmodern change wrought by RPAs. However, it is important to note that the deployment of drone technology in this case was for the purpose of decreasing violence.

Remotely piloted aircraft do raise two interesting issues that are relevant to the concept of postmodern warfare. First, employment of remotely piloted aircraft can potentially change the discourse and identity of its purveyors. Second, this altered discourse invites probes from post-national entities concerned with human rights.

A state that employs remotely piloted vehicles to coerce its enemies accepts less risk than it would if it placed its citizens in harm's way. This decreased level of risk changes the political calculus of war. Specifically, Clausewitz posited that the level of effort in war is limited by the political object to be attained. Where the political object is

---

<sup>74</sup> Krepenovich, "Democratizing Destruction," 1.

<sup>75</sup> Colum Lynch "U.N. eyes drones for peacekeeping missions," *Washington Post* 8 Jan. 2013: A1.

great—such as a survival situation—the level of violence will rise to the extreme. An extreme level of violence usually carries the risk of retaliation with a similar degree of violence. However, the United States has a near-monopoly on the coercive instrument of RPAs; and thus risks very little bloodshed as it employs violence for political ends. Therefore, the United States can levy great violence, at small political risk, for relatively small political goals.

In turn, a state that employs increased violence with decreased risk can alter its central identity. Decisions about the role of technology in the national security apparatus can potentially lead to the next iteration in the civil-military evolution of the United States: from an agrarian nation that banded together militias to defend the ideals of equality and liberty, to a technocratic nation that created a massive standing military in order that those ideals might prevail during the Cold War, to a state with a permanent kill-list populated with individual names. As Kurt Volker, the US ambassador to NATO from 2008-2009, says, investment in the technology of RPAs risks changing the identity of America to that of a “distant, high-tech, amoral purveyor of death.”<sup>76</sup>

Second, this changed discourse, which allows adversaries to depict the United States as such a monster, invites probes from post-national entities like the United Nations. For example, independent UN human rights researcher Ben Emmerson (the UN special rapporteur on counterterrorism and human rights) and Christof Heyns (the UN special rapporteur on extrajudicial, summary, or arbitrary executions) have established an investigative unit to probe US drone attacks. Their unit will follow procedures set forth

---

<sup>76</sup> Kurt Volker “The risks of relying on drones,” *Washington Post* 28 Oct. 2012: A17.

by the UN Human Rights Council.<sup>77</sup> Although the unit's conclusions do not officially represent the views of the United Nations, its leaders' affiliation with the body will make their remarks more powerful than they otherwise would be.

Notwithstanding its potential to change discourse and identity, robots, drones, and other so-called autonomous battlefield technology is still rooted firmly in the modern era. It is not truly autonomous at all. This technology requires many people and vast industry to build, program, test, maintain, and operate. It does not think, and it is not intelligent. The only seed of revolutionary change resident in autonomous warfare technology is in its potential proliferation to different political groups than states, and a corresponding ability to rewrite political narratives. Michael Gerson, for instance, views RPAs as merely a technical evolution in anticipatory self-defense, which has been a part of American identity since before WWI.<sup>78</sup>

### **Conclusion**

Despite the sensational, book-selling assessments of modern technology and its relation to war, today's technological advances do not represent revolutionary change. The *status quo* implementation of technology in warfare is modern and industrial.

On the other hand, the capacity exists to adapt these technological developments to advance postmodern or postindustrial structures. Smaller, non-state political groups can greatly augment their destructive and coercive power with the use of RPAs and cyberspace communications, for example.

---

<sup>77</sup> Colum Lynch. "U.N. to probe drone strikes resulting in civilian deaths," *Washington Post* 26 Oct. 2012: A7.

<sup>78</sup> Michael Gerson, "Old rules in a new fight," *Washington Post* 8 Feb. 2013: A17.

Contrary to C.H. Gray's assertion that "information is now the single most significant military factor,"<sup>79</sup> raw industrial capacity and capability still matter more. If information is the organizing principle in postmodern warfare,<sup>80</sup> the preeminence of states as the central organizational structure today points to the fact that warfare is still firmly planted in the modern era.

---

<sup>79</sup> Gray, *Postmodern Warfare*, 22.

<sup>80</sup> Gray, *Postmodern Warfare*, 82.

## Conclusions

*The conduct of warfare through the ages and across the continents demonstrates that discourses on war have been of greater importance than have weapons technology and other staples of military history.*

-- John Lynn, *Battle*

*The idea of the future being different from the present is so repugnant to our conventional modes of thought and behavior that we, most of us, offer a great resistance to acting on it in practice.*

-- John Maynard Keynes, 1937

Although contemporary changes appear infinite and unrelenting, two key aspects of human history will remain constant: the inevitability of conflict, and the necessity of some element of force as the ultimate arbiter. Due to the unequal distribution of circumstances, human beings engage in politics: the discourse of identity, grouping, and rule-setting. As Clausewitz declared 200 years ago, war is politics by violent means.

Despite proclamations that warfare has entered a new era—postmodern, revolutionary, post-industrial, information-based, autonomous, or otherwise—it remains a thoroughly modern form of human political conflict. To exit the modern era, warfare will have to detach from politics, nationalism, and industry. Truly postmodern warfare requires some combination of identity-centric postmodernism, post-nationalism, and post-industrialism.

## Postmodern Warfare

Postmodern warfare exists when it is engaged for pure ritual, not politics. Discourse is the central reality of postmodernism. Voices in the historical conversation create meaning out of an infinite array of events and analyses. In postmodern

epistemology, truth is not the adherence of the intellect to the *things* (as in modern thought), but the agreement of the intellect with the *story* of the things. In the era of postmodern warfare, the central organizing principle will be this narrative itself.

Postmodern warfare—in the first sense—must become warfare as a ritual of pure identity. In this model, the identity-defining warfare must not serve any other political purpose. It must not aim to gain power for a particular identity group, nor to realign people into different groups. It must not be waged to establish a new political rule-set. Postmodern warfare, therefore, must essentially detach from everything politics does.

Unless the human condition changes such that mankind no longer engages in politics, postmodern warfare in the first sense appears impossible. As Madison said at the time of the birth of the United States, because circumstances are distributed unequally among men, some will engage in politics to try to change their situation. Genetics and geography will ensure the perpetually unequal distribution of circumstances among men. Thus, politics and conflict will remain.

In this sense, postmodern warfare is nearly inconceivable. Apparent present-day anomalies like sacred war are simply feeble efforts at political regrouping.

### **Post-National Warfare**

Postmodern warfare exists when the central organizing principle is something other than an anarchic array of states differentiated by level of capability. Postmodern warfare requires a post-national global political structure and civil-military relationship.

Such a novel structure depends upon the redistribution of social power from states to something else. Tremendous resistance to such change exists due to the fact that social power is derived from the possession of physical instruments of coercion—and also from

the ability to secure unreasoned and unreasonable obedience, respect and reverence—both of which are allocated almost exclusively to states.

Whereas modern warfare is waged by states—sometimes in the name of the principles those states profess, such as justice and liberty—postmodern warfare must be waged by groups of people who are not discernible based on their geographic location, but by the very principles they espouse.

Although this type of warfare arguably exists today, it is of secondary importance in modern society. For instance, the Al-Qaeda network's attacks on the World Trade Center and the Pentagon in 2001 were carried out by a non-state entity in the name of a religious creed. However, the attackers worked to plan and carry out their politics while constrained by a state-based system in which they had to apply for passports and participate in the international monetary system, for example. Furthermore, their attacks invited a massive, state-based response. The United States persuaded other states to invade the state that harbored the terrorist group, overthrowing the system of governance within that state and creating a new establishment to rule Afghanistan.

In this sense, postmodern warfare takes place in the margins, even if its discourse can dominate a powerful state society for a decade.

### **Post-Industrial Warfare**

Postmodern warfare must be carried out with almost entirely post-industrial means. Although twenty-first century technologies change the means and danger of attack, as well as the subjective perception of threats, they are limited by the realities of industrial paradigms. Distribution, logistics, and geography each have far more powerful impact on war today than does information, automation, or artificial intelligence.

However, some budding technologies can potentially move warfare in the direction of postmodernism in the first two senses. That is, new technologies can alter the industrial nature of the physical instruments of coercion, or redraw maps of loyalty and political groupings.

Despite the potential for change that technology creates, postmodern warfare in this sense is not within sight.

### **Voices in the Narrative**

Excited descriptions of some new era conflate postmodernism with general change and “newness.” A sober, theory-based assessment of the current state of global politics, civil-military relations, and technology reveals an entirely modern *status quo* peppered with seeds of revolutionary change.

These seeds of revolutionary change do not portend a postmodern era *per se*. Instead, people will drive the course of events through decisions seemingly unrelated to postmodernism itself. Decisions about sovereign decision authority, military missions, military force structure, and technology will determine the future course of warfare. Although the Clausewitzian nature of warfare will not change, the political groups that carry it out, the class of people who engage in it, and the technological means with which its ends are achieved all depend upon decisions of leaders today.

### ***Defense Spending***

During the impending decade of severe fiscal austerity in the United States, defense spending cannot effectively be spread with breadth and depth across every physical domain and every geographic combatant command. Investments will have to be prioritized based upon the envisioned future threat. John Tanner, former US

Representative from Tennessee and President of the NATO Parliamentary Assembly from 2008-2010, says “virtually everyone in the defense establishment of our country agrees that the clear and present danger to the United States does not lie in a uniformed military attack on our homeland. Therefore, our standing military forces and array of weaponry no longer possess the deterrent factor that they did during the Cold War...Our best defense lies in intelligence networks and military alliances such as NATO.”<sup>1</sup>

Whether or not it sounds like the preceding one, a narrative will determine political groupings, including interest groups who will define what is foreign and then depict the dominant security threats. The investment response is likely to remain consistent with traditional American identity and its penchant for the incorporation of new technology and preparation for massive, state-on-state warfare.

It would be most productive to embrace this aspect of American identity and invest in a force consistent with the inexorable narrative. The prescription is paradoxical: to adopt postmodern discourse by developing the most technologically advanced and effective instruments of coercion on the planet. That is, to advance the truth of the story of the artifacts by investing in a truth based in the artifacts themselves.

Furthermore, senior leaders must choose to engage only in conflicts that further a narrative consistent with American ideals. This does not mean intervention in foreign affairs in the name of human rights. It does not mean nation-building and regime change. Instead, it prescribes engagement in conflicts of truly national survival, measurable in terms of capability for destruction. The Cold War serves as a perfect example of such a preferable conflict. The Cold War was a battle for the survival of the United States and the ideals for which the United States stands. The war’s potential outcome was debated

---

<sup>1</sup> John Tanner, “What Hagel offers the Pentagon,” *Washington Post* 9 Feb. 2013: A12.

in terms of numbers of nuclear weapons, ICBMs, fighters, bombers, troops, and bases—not the need to win “hearts and minds.” Such a strategic bet—investment in technology and engagement only for survival—promises to protect US sovereignty, the anarchic global political system, and ultimately the ideals upon which the United States is based. After all, core American ideals are essentially postmodern ideals.

### ***The United States of America as a Proto-Postmodern Entity***

Interestingly, the United States of America stands out as an exemplar of certain elements of postmodern warfare. That is, the United States provides examples of identity-based postmodernism, post-nationalism, and post-industrialism.

First, the United States is postmodern in the first sense in that it evinces a narrative-driven identity. Many Americans think of their state’s power as having derived from a narrative, not from a raw capacity for violent coercion. In other words, people view the ideals of liberty and justice—which some interest groups would argue are not even implemented in the United States—as the source of American greatness. The Founding Fathers, however, recognized that social power derives from unreasoned loyalty and the ability to coerce. Therefore, they distributed government’s power to three separate and competing institutions that would develop different norms and customs. Importantly, this narrative-driven identity garners increased loyalty to the state, which further expands the state’s power. In turn, the state is able to defend and expound on the narrative of liberty, justice, and the rule of law on the international stage.

Second, the United States participates heavily in international discourse that is postmodern in the post-national sense. That is, representatives of a sovereign and powerful United States often act according to the norms and standards of international

institutions like the United Nations. For example, the US frequently seeks UN approbation prior to committing coercive acts. However, the difference in an era of postmodern warfare will be that the United States' model of securing the rule of law will be distributed with lesser regard for the limitations of physical geography. Americans will be able to join the US security structure regardless of place of birth. If they profess loyalty to a constitution-based rule of law, they can then contribute to the coercive means that secure it.

Third, the United States is postmodern in the sense that it is keen to develop a thriving post-industrial economy. Although it sits atop a hierarchy of power based in industrial strength, US leaders foresee a future economy in which information and network capacity play a larger role. The United States does not seek to disrupt the growth of an information economy in order to protect its status as an industrial leader. Instead, it aims to position itself as a leader in such a new economy, too. Likewise, in terms of military capability, the United States continues to expand its investment in cyberspace.

The advocates, and the critics alike, of postmodernism have reason to support an expansion of American power because the United States is an instantiation of the fundamental ideals of the postmodernist: the acceptance of a truth based in a story of the artifacts, not in the artifacts themselves; and the expansion of the social contract beyond traditional state boundaries. Advocates of postmodernism must recognize the eternality of conflict and coercion, and critics must acknowledge the role of the narrative in framing the truth.

The men and women who drive the affairs of mankind into the next era will act as history's pilots. A pilot anticipates events based on an evolving sight picture. If the pilot is flying too low, an object that appears above the horizon is a potential hazard to his flight path. Objects below the horizon are not a hazard, but convey important information about his future flight path. It is difficult to anticipate the character of obstacles that lie out of sight entirely, beyond the horizon. The best he can do is consider the trend lines of his current sight picture and determine if he needs to change path to get to where he is trying to go. Today, postmodern warfare is beyond the horizon, but, with the aid of theory—a map for thinking about postmodern warfare—some landmarks are coming into sight.

Alternatively, postmodern warfare may more accurately be characterized as a way of reflecting upon reality, not necessarily a way of being. In that sense, postmodern warfare is perhaps a premature construct for thinking about current conflict, not an immature reality. Future historians may look back upon the early decades of the 21<sup>st</sup> century and label those conflicts the first of the postmodern wars.

## BIBLIOGRAPHY

- Abu-Lughod, Janet L. *Before European Hegemony: The World System A. D. 1250-1350*. New York: Oxford UP, 1989.
- Adams, Thomas K. *The Army After Next: The First Postindustrial Army*. Westport, CT.: Praeger Security International, 2006.
- Anderson, Nick. "Free online courses' growth boosted by foreign colleges." *Washington Post* 21 Feb. 2012: A13.
- Anderson, Sarah and John Cavanagh. *Top 200: The Rise of Corporate Global Power*. Washington, DC: Institute for Policy Studies, 2000.
- Andrew Hessel, Marc Goodman, Steven Kotler. "Hacking the President's DNA." *The Atlantic* November 2012.
- Andrews, Fred. "The Military Machine as a Management Wreck." *New York Times* 6 Jan. 2013: BU5.
- Aquinas, Thomas. *Summa Theologica*. Ed. Kevin Knight. Trans. Fathers of the English Dominican Province. 2008. Online. Internet. 4 Jan. 2013.  
<<http://www.newadvent.org/summa/1016.htm>>.
- Ball, James. "A Catch-22 for Internet-freedom tools." *Washington Post* 22 Oct. 2012: A1.
- Barchfield, Jenny and Juliana Barrassa. "Google Executive Detained in Brazil." *Washington Post* 27 Sep. 2012: A12.
- Barnes, Julian E. and Dion Nissenbaum. "Combat Ban for Women to End." *Wall Street Journal* 24 Jan. 2013: A1.
- Battistelli, Fabrizio. "Peacekeeping and the Postmodern Soldier." *Armed Forces & Society* 23.3 (Spring, 1997): 467-484.
- Bayer, R. *Homosexuality and American psychiatry: The politics of diagnosis*. 2nd Ed. Princeton: Princeton UP, 1987.
- Begby, Endre. "Liberty, Statehood, and Sovereignty: Walzer on Mill on Non-intervention." *Journal of Military Ethics* 2.1 (Jan. 2003): 46-62.
- Bell, Daniel. *The Coming of Post-industrial Society*. New York: Harper Collins, 1974.
- Best, Stephen. "Foucault, Postmodernism, and Social Theory." Dickens, David R. and Andrea Fontana. *Postmodernism and Social Inquiry*. London: The Guilford Press, 1994. 25-28.
- Bijker, Wiebe E., Thomas P. Hughes and Trevor Pinch, *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*. Cambridge: The MIT Press, 1987.
- Birnbaum, Michael. "Europe agrees to banking regulator." *Washington Post* 19 Oct. 2012: A16.
- Bloom, B.R. "Genome sequences. A microbial minimalist." *Nature* 1995: 236.
- Booth, Bradford, Meyer Kestnbaum and David R. Segal. "Are Post-Cold War Militaries Postmodern?" *Armed Forces & Society* 27.3 (Spring 2001): 319-342.
- Brenner, Susan W. *Cyberthreats: The Emerging Fault Lines of the Nation State*. Oxford: Oxford UP, 2009.
- Brooks, David. "The Crossroads Nation." *New York Times* 8 November 2010: A21.
- Brulliard, Karin. "Governing coalition in Israel loses key party." *Washington Post* 18 Jul. 2012. Kindle edition.

- Buzan, Barry, Ole Waever and Jaap de Wilde. *Security: A New Framework for Analysis*. Boulder, CO: Lynne Rienner Publishers, 1998.
- Caforio, Giuseppe. *Handbook of the Sociology of the Military*. New York: Springer, 2006.
- Carafano, James Jay. *Private Sector, Public Wars: Contractors in Combat--Afghanistan, Iraq, and Future Conflicts*. Westport, CT: Praeger Security, 2008.
- Carr, E. H. *The Twenty Years' Crisis: 1919-1939*. New York: Perennial, 2001.
- Claire M. Fraser, Malcolm R. Dando. "Genomics and future biological weapons: the need for preventive action by the biomedical community." *Nature Genetics* 22 October 2001. Online: [cmbi.bjmu.edu.cn/201/insight-anthrax/feature/Genomics%20and%20future%20biological%20weapons.pdf](http://cmbi.bjmu.edu.cn/201/insight-anthrax/feature/Genomics%20and%20future%20biological%20weapons.pdf).
- Clarke, Richard A. "Stop ignoring the online thieves." *Washington Post* 8 Feb. 2013: A17.
- Clausewitz, Carl. *On War*. Trans. Michael Howard and Peter Paret. Princeton: Princeton UP, 1984.
- Cody, Edward. "Syria Weighs Heavily on France." *Washington Post* 11 Sep. 2012: A8.
- Cohen, Eliot A. *Citizens and Soldiers*. Ithaca: Cornell University Press, 1985.
- Dao, James. "Leashing the Blogs of War." 8 September 2009. *blogs.nytimes.com*. Online. Internet. 17 February 2010. <<http://atwar.blogs.nytimes.com/2009/09/08/leashing-the-blogs-of-war/>>.
- DARPA Defense Sciences Office. "Physical Intelligence." 21 Dec. 2012. *darpa.mil*. Online. Internet. <[http://www.darpa.mil/Our\\_Work/DSO/Programs/Physical\\_Intelligence.aspx](http://www.darpa.mil/Our_Work/DSO/Programs/Physical_Intelligence.aspx)>.
- . "Systems of Neuromorphic Adaptive Plastic Scalable Electronics (SYNAPSE)." 21 Dec. 2012. *darpa.mil*. Online. Internet. <[http://www.darpa.mil/Our\\_Work/DSO/Programs/Systems\\_of\\_Neuromorphic\\_Adaptive\\_Plastic\\_Scalable\\_Electronics\\_\(SYNAPSE\).aspx](http://www.darpa.mil/Our_Work/DSO/Programs/Systems_of_Neuromorphic_Adaptive_Plastic_Scalable_Electronics_(SYNAPSE).aspx)>.
- DARPA. "Using connections to stay ahead of the cyber threat." 22 Jan. 2013. *DARPA.mil*. Online. Internet. 24 Jan. 2013. <<http://www.darpa.mil/NewsEvents/Releases/2013/01/22.aspx>>.
- Deptula, Robbin Laird and David. "Why Air Force Needs Lots Of F-35s: Gen. Hostage On The 'Combat Cloud' ." 10 Jan. 2013. *AOL Defense*. Online. Internet. 10 Jan. 2013. <[defense.aol.com/2013/01/10/why-the-air-force-needs-a-lot-of-f-35s-gen-hostage-on-the-com?a\\_dgi=aolshare\\_twitter](http://defense.aol.com/2013/01/10/why-the-air-force-needs-a-lot-of-f-35s-gen-hostage-on-the-com?a_dgi=aolshare_twitter)>.
- DeYoung, Karen and Edward Cody. "New NATO strategy alters deployment of weapons systems." *Washington Post* 17 Nov. 2011: A10.
- Dolman, Everett C. *Astropolitik: Classical Geopolitics in the Space Age*. London: Frank Cass, 2002.
- . *The Warrior State: How Military Organization Structures Politics*. New York: Palgrave MacMillan, 2004.
- Dolman, Everett. "The Age of Transparency?" *Information and Cyber Power*. Maxwell AFB, AL: School of Advanced Air and Space Studies, 4 December 2009.
- Dudziak, Mary L. *War Time*. New York: Oxford UP, 2012.
- Echevarria, Antulio and John M. Shaw. "The New Military Revolution: Post-Industrial Change." *Parameters* Winter (1992-3): 70-79.

- "Ecowas authorizes troop deployment in Mali." 11 Jan. 2013. *News 24*. Online. Internet. 11 Jan. 2013. <m.news24.com/news24/Africa/News/Ecowas-authorizes-troop-deployment-in-Mali-20130111 >.
- Erlanger, Steven. "Iran Nears Deal on Inspecting Atomic Site, U.N. Chief Says ." 22 May 2012. *New York Times*. Online. Internet. 11 Jan. 2013. <<http://www.nytimes.com/2012/05/23/world/middleeast/un-nuclear-monitor-strikes-deal-with-iran-reports-say.h>>.
- "Excuses for inaction." *Washington Post* . Editorial 29 Jan. 2013: A14.
- Faiola, Anthony. "In crisis, Portugal tries to transform." *Washington Post* 23 May 2012: A8.
- . "Scotland to vote on independence." *Washington Post* 16 Oct. 2012: A12.
- Fallows, James. "Military Efficiency." *The Atlantic* Aug. 1991: 30-34.
- Feaver, Peter. *Armed Servants: Agency, Oversight, and Civil-Military Relations*. Cambridge: Harvard UP, 2003.
- Forero, Juan. "Colombian rebels launch tirade as peace talks begin." *Washington Post* 19 Oct. 2012: A14.
- Foucault, Michel. *Discipline and Punish: The Birth of the Prison*. New York: Knopf Doubleday, 1977.
- Foucault, Michel. "Regime of Truth ." *Power/Knowledge: Selected Interviews and other Writings*. New York: Pantheon Books, 1980.
- Fraser, Claire M. and Malcolm R. Dando. "Genomics and future biological weapons: the need for preventive action by the biomedical community." 22 Oct. 2001. *Nature Genetics*. Online. Internet. 17 Dec. 2012. <[cmbi.bjmu.edu.cn/201/insight-anthrax/feature/Genomics%20and%20future%20biological%20weapons.pdf](http://cmbi.bjmu.edu.cn/201/insight-anthrax/feature/Genomics%20and%20future%20biological%20weapons.pdf)>.
- Fulghum, David. "Threat Grows, Budgets Shrink, EW Could Be Compromised." 3 August 2011. *Aviationweek.com*. online: <http://www.aviationweek.com/aw/blogs/defense/index.jsp?plckController=Blog&plckScript=blogScript&plckElementId=blogDest&plckBlogPage=BlogViewPost&plckPostId=Blog%3a27ec4a53-dcc8-42d0-bd3a-01329aef79a7Post%3a579780b5-aed7-4bc6-b362-8cb4042b878d>. 17 December 2012.
- Gaddis, John Lewis. "Toward the Post-Cold War World." *Foreign Affairs* 70.2 (1991): 102-122.
- Garreau, Joel. *Radical Evolution: The Promise and Peril of Enhancing Our Minds, Our Bodies--and what it means to be human*. New York: Broadway Books, 2005.
- Gerson, Michael. "Old rules in a new fight." *Washington Post* 8 Feb. 2013: A17.
- . "Wars we've left behind." *Washington Post* 29 Oct. 2012: A23.
- Gilpin, Robert. *Global Political Economy: Understanding the International Economic Order*. Princeton: Princeton University Press, 2001.
- . *War and Change in World Politics*. Cambridge: Cambridge University Press, 1981.
- Glimcher, Paul W. *Decisions, Uncertainty, and the Brain: The Science of Neuroeconomics*. Cambridge, Massachusetts: The MIT Press, 2003.
- Gorman, Siobhan and Julian E. Barnes. "Iran Blamed for Cyberattacks." *Wall Street Journal* 13 Oct. 2012: A1.
- Gottfredson, L.S. "Intelligence and social policy." *Intelligence* 1997: 1-12.

- Goure, Daniel. *Smart Defense And The International Program For The F-35 Joint Strike Fighter*. Arlington, VA, 10 May 2012. Online. Internet.  
<<http://www.lexingtoninstitute.org/smart-defense-and-the-international-program-for-the-f-35-joint-strike-fighter?a=1&c=1171>>.
- Gray, Chris Hables. *Postmodern War: The New Politics of Conflict*. New York: The Guilford Press, 1997.
- Griffith, Samuel B. *Sun Tzu: The Illustrated Art of War*. New York: Oxford University Press, 2005.
- "Gulf Cooperation Council [GCC]." 11 Jan. 2013. *Globalsecurity.org*.  
<<http://www.globalsecurity.org/military/world/gulf/gcc.htm>>.
- Hall, Stephen S. "Hidden Treasures in Junk DNA." *Scientific American* Oct. 2012: 23-34.
- Handel, Michael. "Technological Surprise in War." *Intelligence and National Security* 1987: 1-15.
- Hassner, Pierre. "From War and Peace to Violence and Intervention: Permanent Moral Dilemmas Under Changing Political and Technological Conditions." *Hard Choices: Moral Dilemmas in Humanitarian Intervention*. Ed. Jonathan Moore. Lanham, MD: Rowman and Littlefield Publishers, Inc., 1998. 287-313.
- Heilbroner, Robert L. "Do Machines Make History?" *Technology and Culture* 8.3 (1967): 335-345.
- Henrikson, Dag. *NATO's Gamble: Combining Diplomacy and Airpower in the Kosovo Crisis 1998-1999*. Annapolis: Naval Institute Press, 2007.
- Hessel, Andrew, Marc Goodman and Steven Kotler. "Hacking the President's DNA." *The Atlantic* Nov. 2012: 2-10.
- Hickman, Kennedy. "Anglo-Zulu War: Battle of Isandlwana." 14 Dec. 2012. *About.com*. Online. Internet. <<http://militaryhistory.about.com/od/battleswarss1800s/p/isandlwana.htm>>.
- House, Jonathan. "Catalonia Sets Independence Referendum." *Wall Street Journal* 20 Dec. 2012: A12.
- Hughes, Thomas P. "Technological Momentum." *Does Technology Drive History? The Dilemma of Technological Determinism*. Ed. Merritt Roe Smith and Leo Marx. Cambridge, Mass: The MIT Press, 1994. 101-113.
- Huntington, Samuel P. *The Soldier and the State: The Theory and Politics of Civil-Military Relations*. Cambridge, Mass: Belknap Press, 1957.
- Huntington, Samuel. "Transnational Organizations and World Politics." *World Politics* 25.3 (1973): 333.
- Ignatieff, Michael. "The Stories We Tell: Television and Humanitarian Aid." *Hard Choices: Moral Dilemmas in Humanitarian Intervention*. Ed. Jonathan Moore. Lanham, MD: Rowman and Littlefield Publishers, Inc., 1998. 287-311.
- Imray, Gerald. "Marathoner is Running Under the Olympic Flag." *Washington Post* 10 Aug. 2012: A14.
- Jaffe, Greg. "Real tensions over a theoretical war." *Washington Post* 2 Aug. 2012: A1.
- James B. Petro, Theodore R. Plasse, Jack A. McNulty. "Biotechnology: Impact on Biological Warfare and Biodefense." *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science, Vol. 1* September 2003: 161-168.
- Janowitz, Morris. *On Social Organization and Social Control*. Chicago: The U of Chicago P, 1991.

- . *The Professional Soldier: A Social and Political Portrait*. Glencoe, Ill.: Free Press, 1960.
- Jencks, Charles. *The Language of Post-Modern Architecture*. Michigan: Rizzoli, 1984.
- Jervis, Robert. *Perception and Misperception in International Politics*. Princeton, New Jersey: Princeton UP, 1976.
- "Joint Strike Fighter Production, Sustainment, and Follow-on Development Memorandum of Understanding (JSF PSFD MOU)." 2010. *jsf.mil*. Online. Internet. 17 Oct. 2012.  
<[http://www.jsf.mil/downloads/documents/JSF\\_PSFD\\_MOU\\_-\\_Update\\_4\\_2010.PDF](http://www.jsf.mil/downloads/documents/JSF_PSFD_MOU_-_Update_4_2010.PDF)>.
- Kagan, Robert. "The Price of Power." *The Weekly Standard* 24 Jan 2011: 27.
- Kahneman, Daniel. *Thinking, Fast and Slow*. New York: Farrar, Straus, and Giroux, 2011.
- Kang, Cecelia. "3-D printers could make your desk a factory." *Washington Post* 8 Jan. 2013: A1.
- Kant, Immanuel. *Eternal Peace and Other International Essays*. Trans. W. Hastie. Boston: The World Peace Foundation, 1914.
- Karam, Zeina. "France, U.S. back Syrian coalition." *Washington Post* 14 Nov. 2012: A10.
- Keegan, John. *A History of Warfare*. New York: Vintage Books, 1993.
- Kellner, Douglas. "Postmodern Military and Permanent War." *Masters of War: Militarism and Blowback in the Era of American Empire*. Ed. Carl Boggs. New York: Routledge, 2003. 239-242.
- Kelly, Kevin. "Better Than Human: Why Robots Will - And Must - Take Our Jobs." 24 Dec. 2012. *Wired*. Online. Internet. 9 Jan. 2013.  
<<http://www.wired.com/gadgetlab/2012/12/ff-robots-will-take-our-jobs/>>.
- Kelly, Mark. *Internet Encyclopedia of Philosophy: Michel Foucault (1926-1984)*. 11 November 2010. <http://www.iep.utm.edu/foucault/#SH3d>. 20 September 2012.
- Keys, Tracey and Thomas Malnight. *Corporate Clout: The Influence of the World's Largest 100 Economic Entities*. 2012. Online. Internet. 5 October 2012.  
<<http://www.globaltrends.com/knowledge-center/features/shapers-and-influencers/66-corporate-clout-the-influence-of-the-worlds-largest-100-economic-entities>>.
- Khazan, Olga. "E.U.'s Nobel Prize raises eyebrows." *Washington Post* 12 Oct. 2012. Online. Internet. <[http://www.washingtonpost.com/blogs/blogpost/post/eus-nobel-prize-raises-eyebrows/2012/10/12/4621a4fa-147e-11e2-bf18-a8a596df4bee\\_blog.html](http://www.washingtonpost.com/blogs/blogpost/post/eus-nobel-prize-raises-eyebrows/2012/10/12/4621a4fa-147e-11e2-bf18-a8a596df4bee_blog.html)>.
- Kitfield, James. "Compromise, or We Shoot the Pentagon." 16 Aug. 2011. *NationalJournal.com*. Online. Internet.
- Kraemer, John and Toby Prescott. Interview. Jeff Geraghty. 8 Nov. 2012.
- Krepinevich, Andrew. "Democratizing Destruction." 7 May 2012. *Foreignpolicy.com*. Online. Internet.  
<[http://www.foreignpolicy.com/articles/2011/08/15/get\\_ready\\_for\\_the\\_democratization\\_of\\_destruction](http://www.foreignpolicy.com/articles/2011/08/15/get_ready_for_the_democratization_of_destruction)>.
- Laird, Melvin R. "We don't need a draft." *Washington Post* 23 Feb. 2013: A19.

- Libicki, Martin C. *Conquest in Cyberspace*. Cambridge: Cambridge University Press, 2007.
- Lieberman, Joseph I. "Protecting against a 'cyber 9/11'." *Washington Post* 10 Oct. 2012: A21.
- Londono, Ernesto. "Medal to honor troops for cyber-ops, drone strikes." *Washington Post* 14 Feb. 2013: A9.
- Lonsdale, David J. *The Nature of War in the Information Age: Clausewitzian Future*. London: Frank Cass, 2004.
- Lord, Kristin M. *The Perils and Promise of Global Transparency: Why the Information Revolution May not Lead to Security, Democracy, or Peace*. Albany: State University of New York, 2006.
- Lynch, Colum. "U.N. eyes drones for peacekeeping missions." *Washington Post* 8 Jan. 2013: A1.
- . "U.N. to probe drone strikes resulting in civilian deaths." *Washington Post* 26 Oct. 2012: A7.
- Lyotard, Jean-Francois. *The Postmodern Condition: A Report on Knowledge*. Trans. Geoff Bennington and Brian Massumi. Minneapolis: U of Minnesota P, 1984.
- Mahan, A.T. *The Influence of Sea Power Upon History, 1660-1783*. New York: Dover Publications, Inc., 1987.
- Markoff, John. "Report Looks at How China Meddled With the Internet." *New York Times* 17 Nov. 2010.
- Marsh, Leslie. *Hayek in Mind: Hayek's Philosophical Psychology*. Bingley, UK: Emerald Group Publishing Limited, 2011.
- McChrystal, Stanley. "Step Up For Your Country." *Newsweek* 31 Jan. 2011: 36.
- McGreal, Ian. *Great Thinkers of the Western World*. New York: Harper Collins Publishers, 1992.
- McLuhan, Marshall. *Understanding Media: The Extensions of Man, Critical Edition*. Ed. W. Terrence Gordon. Corte Madera, CA: Gingko Press, 2003.
- McNeill, William H. *The Pursuit of Power: Technology, Armed Force, and Society since A.D. 1000*. Chicago: The U of Chicago P, 1982.
- Metz, Steven and Phillip R. Cuccia. "Defining War for the 21st Century." *2010 SSI Annual Strategy Conference Report*. Carlisle, PA: Strategic Studies Institute, 2011.
- Meyer, John W. and W. Richard Scott. *Organizational Environments: Ritual and Rationality*. Beverly Hills, CA: Sage, 1983.
- "Military Capabilities." n.d. *Wikipedia*. Online. Internet. 5 Oct. 2012. <[http://en.wikipedia.org/wiki/Military\\_Capabilities/](http://en.wikipedia.org/wiki/Military_Capabilities/)>.
- "Military Expenditure (% of GDP)." n.d. *The World Bank*. Online. Internet. 9 Jan. 13. <<http://data.worldbank.org/indicator/MS.MIL.XPND.GD.ZS>>.
- Mill, John Stuart. "A few words on non-intervention." *Fraser's Magazine* LX (1859): 766-776.
- Miller, Greg. "US set to keep kill lists for years." *Washington Post* 24 Oct. 2012: A1.
- Millet, Allan R. and Peter Maslowski. *For the Common Defense: A Military History of the United States of America*. New York: The Free Press, 1994.
- Mitchell, William "Billy". *Winged Defense*. Tuscaloosa, AL: The University of Alabama Press, 2009.

- Moltz, James Clay. *The Politics of Space Security: Strategic Restraint and the Pursuit of National Interests*. Stanford, CA: Stanford University Press, 2008.
- Moore, Mike. *Twilight War: The Folly of U.S. Space Dominance*. Washington, D.C.: The Independent Institute, 2008.
- Moskos, Charles C., John Allen Williams and David R. Segal, *The Postmodern Military: Armed Forces after the Cold War*. New York: Oxford UP, 2000.
- Moskos, Charles. "The American Soldier after the Cold War: Towards a Post-Modern Military?" *U.S. Army Research Institute for the Behavioral and Social Sciences* (Oct. 1998).
- Munslow, Alun. *Deconstructing History*. 2nd ed. New York: Routledge, 1997.
- Nakashima, Ellen. "Cyber-spying said to target U.S. business." *Washington Post* 11 Feb. 2013: A1+.
- . "Malware targets European agencies." *Washington Post* 15 Jan. 2013: A3.
- . "Pentagon is debating cyber-attacks." *Washington Post* 5 Nov. 2010: A10.
- . "Pentagon to build up its cybersecurity force." *Washington Post* 28 Jan. 2013: A1.
- National Intelligence Council. "Global Trends 2030: Alternative Worlds." Dec. 2012. *DNI.gov*. Online. Internet. 21 Jan. 2013. <[www.dni.gov/nic/globetrends](http://www.dni.gov/nic/globetrends)>.
- Niebuhr, Reinhold. *Moral Man and Immoral Society: A Study in Ethics and Politics*. New York: Charles Scribner's Sons, 1932.
- . *The Irony of American History*. Chicago: University of Chicago Press, 1952.
- Nielsen, Suzanne C. and Don M. Snider. *American Civil-Military Relations: The Soldier and the State in a New Era*. Baltimore: Johns Hopkins UP, 2009.
- Nietzsche, Friedrich. *Thus Spake Zarathustra*. Trans. Thomas Common. New York: The Modern Library, 1999.
- Obama, Barack. "Remarks by the President on a New Beginning." *The White House, Office of the Press Secretary*. 4 June 2009.
- Ohmae, Kenichi. *The Next Global Stage*. New Jersey: Wharton School Publishing, 2005.
- Olson, Mancur. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge: Harvard UP, 1965.
- Owens, Mackubin T. "Civil-Military Relations and the U.S. Strategy Deficit." February 2010. *Foreign Policy Research Institute*. 30 March 2010. <<http://www.fpri.org/enotes/201002.owens.civilmilitaryrelations.html>>.
- "Palestinians win upgraded status by wide margin." n.d. *BBC News*. Online. Internet . 12 Jan. 2013. <<http://www.bbc.co.uk/news/world-middle-east-20550864>>.
- Parayil, Govindan. *Conceptualizing Technological Change: Theoretical and Empirical Explorations*. Oxford: Rowman & Littlefield Publishers, Inc., 1999.
- Paret, Peter. "Clausewitz." *Makers of Modern Strategy: from Machiavelli to the Nuclear Age*. Ed. Peter Paret. Princeton: Princeton University Press, 1986. 186-213.
- Perry, Dominic. "Norway pushes for further assurances over JSM integration of F-35." 30 Nov. 2012. *Flight International*. Online. Internet. 11 Jan. 2013. <<http://www.flightglobal.com/news/articles/norway-pushes-for-further-assurances-over-jsm-integration-on-f-35-379651/>>.
- Petro, James B., Theodore R. Plasse and Jack A. McNulty. "Biotechnology: Impact on Biological Warfare and Biodefense." *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 2003: 161-168.

- Pfau, Michael, et al. "Embedding Journalists in Military Combat Units: Impact on Newspaper Story Frames and Tone." *Journalism & Mass Communication Quarterly* 81.1 (2004): 74-88.
- Pincus, Walter. "House GOP shouldn't rush to judgment on cyberweapon 'leaks'." *Washington Post* 19 Jul. 2012: A15.
- . "Republican senator's plan trims fat at the Pentagon." *Washington Post* 20 Nov. 2012: A15.
- . "The inevitable blowback to high-tech warfare." *Washington Post* 15 Oct. 2012: A19.
- . "The unaffordability of the all-volunteer military." *Washington Post* 15 Jan. 2013: A13.
- Ramsey, F.P. "Facts and Propositions." *Aristotelian Society Supplementary* 7 (1927): 153-170.
- Reich, Robert B. *The Work of Nations*. New York: Alfred A. Knopf, 1991.
- Reinhardt, Ewe. "Why I Would Raise Taxes." *New York Times* 18 Nov. 2010: A23.
- Reuters. "UAE prince hires Blackwater founder to set up foreign force." *Washington Post* 15 May 2011: A8.
- Revkin, Andrew. "Explaining Egypt." 1 February 2011. *New York Times Dot Earth*. Online. Internet. 1 February 2011. <<http://dotearth.blogs.nytimes.com/2011/02/01/explaining-egypt>>.
- Rummel, Rudolf. *Death by Government*. New Brunswick, N.J.: Transaction Publishers, 1994.
- Rust, Val D. "Postmodernism and Its Comparative Education Implications." *Comparative Education Review* 35.4 (Nov., 1991): 610-626.
- Samuelson, Robert J. "Good questions on education." *Washington Post* 29 Dec. 2012: A23.
- . "The Great Reversal?" *Washington Post* 8 Oct. 2012: A19.
- Sanger, David. "Obama Order Sped Up Wave of Cyber Attacks Against Iran." *New York Times* 1 Jun. 2012: A1.
- Schaeffer, Jonathan, et al. "Checkers is Solved." *Science* 317.5844 (2007): 1518 – 1522.
- Schank, Roger C. *Tell Me A Story: Narrative and Intelligence*. Evanston, Illinois: Northwestern UP, 1990.
- Schelling, Thomas C. *Arms and Influence*. Princeton: Yale UP, 1966.
- Schneider, Howard. "Europe signs off on common oversight of banks." *Washington Post* 14 Dec. 2012: A25.
- Schnieder, Howard. "As G-8 leaders meet, a test for the euro zone." *Washington Post* 17 May 2012: A9.
- Schwartz, Moshe. *Department of Defense Contractors in Iraq and Afghanistan: Background and Analysis*. Washington, DC: Congressional Research Service, 2009.
- Shane, Leo. "Repeal ends decades-long fight against DADT." *Stars and Stripes* 20 September 2011. Online. Internet. <<http://www.stripes.com/news/repeal-ends-decades-long-fight-against-dadt-1.155670>>.
- Sheehan, Michael. *The Internatinoal Politics of Space*. London: Routledge, 2007.
- Sheehan, Neil. *A Fiery Peace in a Cold War: Bernard Schriever and the Ultimate Weapon*. New York: Vintage Books, 2010.

- Sheldrick, Aaron. "IAEA chief says not optimistic on Iran nuclear talks ." 11 Jan. 2013. *Reuters*. Online. Internet. < <http://www.reuters.com/article/2013/01/11/us-nuclear-iran-iaea-idUSBRE90A0AR20130111>>.
- Shultz, Richard H., Douglas Farah and Itamara V. Lochard. "Armed Groups: A Tier-One Security Priority." *Institute for National Security Studies* 2004: 37-44.
- Shultz, Richard, et al. "The Sources of Instability in the Twenty-First Century: Weak States, Armed Groups, and Irregular Conflict." *Strategic Studies Quarterly* (Summer 2011): 73-94.
- Singer, P. W. *Wired for War: The Robotics Revolution and Conflict in the 21st Century* . New York: The Penguin Press, 2009.
- Skocpol, Theda. *States and Social Revolutions: A Comparative Analysis of France, Russia, and China*. New York: Cambridge UP, 1979.
- Smith, Merritt Roe and Leo Marx, *Does Technology Drive History? The Dilemma of Technological Determinism*. Cambridge: The MIT Press, 1994.
- Snider, Don M. "America's Postmodern Military." *World Policy Journal* (2000): 47-49.
- Spires, David N. *Beyond Horizons: a half century of Air Force space leadership*. Washington, DC: US Government Printing Office, 1998.
- Stewart, Phil and Susan Cornwell. "Pentagon OKs Lifting Ban on Women in Submarines." *Reuters* 23 February 2010.
- Taleb, Nassim Nicholas. *The Black Swan: The Impact of the Highly Improbable*. New York: Random House, 2007.
- Tanner, John. "What Hagel offers the Pentagon." *Washington Post* 9 Feb. 2013: A12.
- "The Nobel Peace Prize 2009 - Press Release." 29 Oct. 2012. *Nobelprize.org*. Online. Internet. <[http://www.nobelprize.org/nobel\\_prizes/peace/laureates/2012/press.html](http://www.nobelprize.org/nobel_prizes/peace/laureates/2012/press.html)>.
- The Nobel Peace Prize, 2012 - Press Release*. October 29 2012. Online. Internet. <[http://www.nobelprize.org/nobel\\_prizes/peace/laureates/2012/press.html](http://www.nobelprize.org/nobel_prizes/peace/laureates/2012/press.html)>.
- Thibodeau, Patrick. "Cyberattacks an Existential Threat to U.S., FBI says." *Computerworld Security* (March, 2010).
- Thompson, Willie. *Postmodernism and History*. New York: Palgrave Macmillan, 2004.
- Timberg, Craig. "Anti-Muslim video shows Web firms' role as speech arbiters." *Washington Post* 15 Sep. 2012: A1.
- Toffler, Alvin. *The Third Wave*. New York: Bantam, 1984.
- Townsend, Charles, et al., *Oxford Illustrated History of Modern War*. Oxford: Oxford University Press, 1997.
- Tsukayama, Hayley. "Report warns of cyber threat to U.S. banks." *Washington Post* 13 Dec. 2012: A15.
- Tuchman, Barbara. *The Proud Tower: A Portrait of the World Before the War (1890-1914)*. New York: Ballantine Books, 1962.
- United Nations Office on Drugs and Crime. *World Drug Report 2012*. New York: United Nations, 2012. Online. Internet. 9 Jan. 2013. <[http://www.unodc.org/documents/data-and-analysis/WDR2012/WDR\\_2012\\_web\\_small.pdf](http://www.unodc.org/documents/data-and-analysis/WDR2012/WDR_2012_web_small.pdf)>.
- "United Nations: Higher Loyalty." 18 Oct. 1954. *Time Magazine*. Online. Internet. 2012 Oct. 15. < <http://www.time.com/time/magazine/article/0,9171,936505,00.html> >.

- "United States Africa Command." n.d. *africom.mil*. Online. Internet. 17 Feb. 2010.  
<<http://www.africom.mil/holmes.asp>>.
- US Navy. "A Cooperative Strategy for 21st Century Seapower." 17 Oct. 2007. Online. Internet. 24 Jan. 2010. <<http://www.navy.mil/maritime/Maritimestrategy.pdf>>.
- "US Office of Management and Budget, Historical Tables." 17 Jan. 2013.  
*Whitehouse.gov*. Online. Internet.  
<<http://www.whitehouse.gov/omb/budget/Historicals>>.
- Vlahos, Michael. *Fighting Identity: Sacred War and World Change*. Westport, CT: Praeger Security International, 2009.
- Volker, Kurt. "The risks of relying on drones." *Washington Post* 28 Oct. 2012: A17.
- Waltz, Kenneth N. *Man, the State, and War*. New York: Columbia UP, 1954.
- . *Theory of International Politics*. Boston: McGraw Hill, 1979.
- Walzer, Michael. *Just and Unjust Wars: A Moral Argument with Historical Illustrations*. 4th ed. New York: Basic Books, 2006.
- Wan, William and Ellen Nakashima. "Chinese cyberspying hits more than 140 targets, report says." *Washington Post* 20 Feb. 2013: A8.
- Watkins, Shanea and James Sherk. "Who Serves in the U.S. Military? The Demographics of Enlisted Troops and Officers." 21 Aug. 2008. *The Heritage Foundation*. Online. Internet. <<http://www.heritage.org/research/reports/2008/08/who-serves-in-the-us-military-the-demographics-of-enlisted-troops-and-officers>>.
- Weigley, Russell. *The American Way of War: A History of United States Military Strategy and Policy*. New York: Macmillan Publishing Company, Inc., 1973.
- Wheatley, Jonathan. "Brazilian panel passes amendment to make pursuit of happiness a right." *The Washington Post* 2011 Nov. 12: A9.
- White, Lynn. *Medieval Technology and Social Change*. Oxford: Oxford University Press, 1966.
- Wicks, Robert. "Friedrich Nietzsche - Early Writings: 1872-1876." *The Stanford Encyclopedia of Philosophy*. Ed. Edward N. Zalta. 2008.
- Wikipedia. *Military Capabilities*. 2012. [en.wikipedia.org/wiki/Military\\_Capabilities](http://en.wikipedia.org/wiki/Military_Capabilities). 5 October 2012.
- Williams, Michael C. "Words, Images, Enemies: Securitization and International Politics." *International Studies Quarterly* 47.4 (2003): 511-531.
- Williams, Michael. "Truth." *Encyclopedia of Philosophy*. New York: Macmillan, 1996. 572-573.
- Wilson, Edward O. *The Social Conquest of Earth*. New York: W.W. Norton and Company, Ltd., 2012.
- Winkler, Matthew and Mark Niquette. "What Young democracies fear: YouTube." *Washington Post* 4 Oct. 2012: A4.
- Winton, Hal. "Why Theory?" Montgomery, AL: School of Advanced Air and Space Studies, 2009.
- Wood, Leonard. *The Military Obligation of Citizenship*. Princeton: Princeton UP, 1915.
- Zacharia, Janine. "Israeli's military faces loss in recruits, status." *Washington Post* 7 Nov. 2012: A14.
- Zakaria, Fareed. "Cultural development." *Washington Post* 2 Aug. 2012: A21.
- Zaloga, Steven. "Technological surprise and the initial period of war: The case of the T-34 tank in 1941." *The Journal of Slavic Military Studies* 6.4 (1993): 634-656.

Zeleny, Jeff and Nicholas Kulish. "Obama, in Berlin, Calls for Renewal of Ties With Allies." *New York Times* 25 Jul. 2008: A1.

Zetter, Kim. "How Digital Detectives Deciphered Stuxnet, the Most Menacing Malware in History." 11 Jul. 2011. *Wired*. Online. Internet. 9 Jan. 2013. <  
<http://www.wired.com/threatlevel/2011/07/how-digital-detectives-deciphered-stuxnet/>>.